

DOCUMENT RESUME

ED 056 186

VT 014 011

AUTHOR Nichols, Charles W.
 TITLE Improving the Preparation of Professional Personnel for Vocational Education in Metropolitan Areas. Final Report.
 INSTITUTION Temple Univ., Philadelphia, Pa. Div. of Vocational Education.
 SPONS AGENCY National Center for Educational Research and Development (DHEW/CE), Washington, D.C.
 PUB DATE Feb 71
 GRANT OEG-0-9-480535-4435(725)
 NOTE 103p.; Vol. XII

EDRS PRICE MF-\$0.65 HC-\$6.58
 DESCRIPTORS Conference Reports; *Information Services; *Information Systems; Institutes (Training Programs); Models; *Professional Personnel; Program Development; Program Evaluation; Research Coordinating Units; Research Utilization; Talent Development; *Urban Areas; *Vocational Education; Vocational Education Teachers

IDENTIFIERS Educational Resources Information Center; ERIC

ABSTRACT

Nineteen participants, along with special consultants, took part in an institute designed to examine and categorize the information services needed by vocational educators in order to use research and other technical information, in planning, implementing, and evaluating vocational education programs. A second objective of the institute was the assessment of the major active or planned information systems or services relevant to vocational education. Presentations heard at the institute include: (1) "ERIC: An Information System," by Roy Butler, (2) "Research Coordinating Units As An Information System," by Clayton Omvig, (3) "An Innovative Program: The Minneapolis Work Opportunity Center," by Michael Joseph, (4) "Occupational Training Information System," by Paul Braden, and (5) "A New Approach to Vocational Teacher Education," by Carl Gorman. Such techniques as total group lectures, large and small group discussion, small group work sessions, and individual conferences with the resource consultants were used to enhance the skills and knowledge of the participants and to achieve the objectives of the institute. An analysis of a 6-month followup indicates high participant satisfaction with most aspects of the institute. (JS)

ED056186

FINAL REPORT

INSTITUTE NUMBER X

Project Number 9-0535
Grant Number OEG-0-9-480535-4435 (725)

METROPOLITAN AREA APPLICATION OF
VOCATIONAL EDUCATION INNOVATIONS
RESULTING FROM RESEARCH AND DEVELOPMENT PROGRAMS

Volume XII

Part of
Short Term Institutes for In-Service Training of Professional
persons responsible for vocational-technical education in Eastern
Metropolitan Areas

Dr. Charles W. Nichols, Chairman
Department of Vocational Education
Kent State University
Kent, Ohio 44242

February 1971

Sponsored and Coordinated by the Division of Vocational
Education, College of Education, Temple University
Philadelphia, Pennsylvania

Director of Institutes

Dr. C. Thomas Olivo

Co-Director

Dr. Albert E. Jochen

U. S. Department of
Health, Education and Welfare

Office of Education
National Center for Educational Research and Development

VT014011

FINAL REPORT

Project Number 9-0535
Grant Number OEG-0-9-480535-4435 (725)

IMPROVING THE PREPARATION OF PROFESSIONAL
PERSONNEL FOR VOCATIONAL EDUCATION IN
METROPOLITAN AREAS

Volume XII

Part of
Short Term Institutes for In-Service Training of
Professional Persons Responsible for Vocational-Technical
Education in Eastern Metropolitan Areas

Dr. Charles W. Nichols, Chairman
Department of Vocational Education
Kent State University
Kent, Ohio 44242

February 1971

Sponsored and Coordinated by the Division of Vocational
Education, College of Education, Temple University
Philadelphia, Pennsylvania

Director of Institutes
Co-Director

Dr. C. Thomas Olivo
Dr. Albert E. Jochen

The research reported herein was performed pursuant to a grant with the Office of Education, U. S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgement in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

U. S. DEPARTMENT OF
HEALTH, EDUCATION AND WELFARE

Office of Education
National Center for Educational Research and Development

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

TABLE OF CONTENTS

	Page
FORWARD	
SUMMARY	
CHAPTER	
I. INTRODUCTION	
The Problem	
Objectives of the Institute	
Outcomes	
General Plan of Operation	
II. METHODS AND PROCEDURES	
Nomination and Selection of Participants	
Planning the Institute	
Role of Consultants and Resource Personnel	
Conducting the Institute	
Orientation of Participants	
Abstracts of Presentations	
(Title of each presentation and the name of of the person or persons making the presen- tation should be listed under this topic.)	
III. EVALUATION OF INSTITUTE	
Evaluation Procedures	
Evaluation Form I; its purpose, use, results.	
Evaluation Form II; its purpose, use, results	
Post-Institute Evaluation; its purpose, use, results	
Conclusions	
IV. RESULTS, CONCLUSIONS, AND RECOMMENDATIONS	
Objectives of Institute	
Participant Contributions	
Attainment of Objectives	
Conclusions	
Recommendations	

APPENDIXES

A.	Brochure and Application Form	
B.	List of Participants, Consultants, and Resource Personnel	
C.	Specimen of Institute Program	
D.	Evaluation Forms Used	
E.	Copies of Models, Guides, and/or Innovative Procedures	

FOREWORD

The staff of the Department of Vocational Education, Kent State University wish to take this opportunity to express sincere appreciation to Dr. Thomas Olivo, Director, and Dr. Al Jochen, Associate Director. Metropolitan Area Institutes, Temple University for their sage advice, wise leadership, and excellent cooperation. The contribution, of the Temple University staff, has been extremely significant to the success of Institute X and all other institutes in the series.

Additional appreciation is hereby expressed to the dedicated professional staff of the United States Office of Education. Special expressions of thanks go to Dr. Jack Wilson, Dr. Mary Lee Hurt, Dr. Albert Rindeau, and Dr. Bruce Blackstone for their fine assistance and encouragement.

Finally, a verbal bouquet to the Institute X consultants, who gave of their time and talents to assist in planning and conducting this institute under extremely adverse conditions. The contributions of this group was above and beyond the call of duty and contributed to the success of the institute.

In the interest of clarity, it is deemed advisable at this point, to describe the events leading up to, and the conditions surrounding the operation of Institute X. Late in the afternoon of May 1, 1970, notices of final acceptance and instructions for participants reporting to Institute X were placed in the mail in the office of the Department of Vocational Education, Kent State University. A subsequent development revealed that the notices were not picked up on May 1, because of a change in the schedule of the mail pickup. For some unknown reason the mail was not picked up on Saturday, May 2.

On Monday, May 4, confusion reigned and tragedy struck the Kent State University campus. This resulted in a complete closing of the university that day. All students were sent home, all faculty were dismissed until further notice, and all university functions ceased. The university was officially and legally closed by court order initiated by the county prosecutor. No one except security personnel and the president of the university was permitted on campus. Thus, the institute director and staff were denied access to the institute materials and records. Furthermore, no target date was established for the resumption of activities. The legal machinery was set in motion to attempt to lift the injunction. One week later the ban, of faculty members on campus, was lifted. However, the announcement was made that the school would remain closed for the remainder of the quarter and no university functions or meetings could be conducted on campus.

Additionally, the faculty was ask to complete the instructional program for the quarter by correspondence, by off campus classes, by telephone, by tape recording, or by any other viable methods.

It was in the face of these events and conditions that the fate of Institute X hung in the balance. The basic question which emerged was, should Institute X be cancelled? After careful deliberation and consultation with the Temple University staff, the decision was made to conduct the institute as scheduled, if off campus facilities could be obtained. The notices which were now in the university mailroom could not be reached. Even if they could be reached, the information was no longer valid. Off campus meeting and living facilities were located and the decision was made to conduct Institute X as scheduled. Time and facilities did not permit mail notification. Numerous telephone calls were utilized to notify the participants. Because of the situation at Kent State University, inflamed by world-wide newspaper and television reports, many participants decided not to attend. In fact, cancellations continued day by day including the first day of the institute. The result was a greatly reduced participant enrollment and an institute that was conducted under virtually emergency conditions.

SUMMARY

GRANT NUMBER OEG-0-9-480535-4435 (725)

TITLE: Institute Number X, Metropolitan Area Application of Vocational Education Innovations Resulting From Research and Development Programs

INSTITUTE DIRECTOR: Dr. Charles W. Nichols, Chairman
Department of Vocational Education

INSTITUTION: Kent State University
East Main Street
Kent, Ohio 44242

DIRECTOR OF INSTITUTES: Dr. C. Thomas Olivo, Professor
Division of Vocational Education
College of Education

CO-DIRECTOR: Dr. Albert E. Jochen
Division of Vocational Education
College of Education

SPONSORING INSTITUTION: Temple University
Philadelphia, Pennsylvania 19122

TRAINING PERIOD: May 18, 1970 to May 22, 1970

Problem, Purposes, and Objectives

Vocational education in this nation must assume a posture of viability and innovativeness. New approaches to program improvement are fundamental to a high quality educational program in this field. A most vexing problem facing vocational educators today is significant educational programs for disadvantaged youth, especially, in urban settings.

An additional major problem stems from the lack of opportunity for vocational education to share the results of research studies, pilot programs, and experimental efforts. A structured program designed to provide for effective communication and interaction is exceedingly important to program success.

Existing information systems appear to be limited in terms of services to local vocational educators. More effective data storage, retrieval, and dissemination are needed.

The institute was planned to focus on the dual problems of sharing information on innovative programs, and reviewing the needs relative to information services available to educators.

Procedures and Activities

A planning committee was utilized in planning the program and suggesting consultants. The institute design and the content recommendations were solicited from authorities in the field of vocational education.

A variety of activities and methods were employed to achieve the goals of the institute. Such techniques as total group lectures, large and small group discussion, small group work sessions, and individual conferences with the resource consultants were used to enhance the skills and knowledge of the participants. Additionally, handout materials and field trips were used when appropriate.

Conclusions and Recommendations

Evaluation of the institute included participant reaction to content, method, facilities, consultants and general satisfaction at the conclusion of the institute. Six months after the institute, a survey was conducted to determine the extent to which the institute content was disseminated and/or implemented at the local level. An analysis of the data indicates high participant satisfaction with most aspects of the institute. The evidence shows that the institute achieved the stated objectives.

The major recommendations made were (1) additional conferences should be provided to share ideas, (2) present information systems are inadequate for the needs of local program planners, and (3) an interface agent is needed between present information systems and user to facilitate more effective utilization.

I. INTRODUCTION

The Problem

The future of vocational education in the United States depends on the quality of program organization and operation, and the availability of innovative approaches to program improvement. The expansion of vocational education throughout the nation increases the significance of quality and innovative programs. Current research, contemporary publications, and first hand experience testify that one of the greatest problems in vocational education, yea in all education, is the disadvantaged youth in urban educational programs of our nations major cities.

There is abundant evidence that a great deal of significant progress has been, and is being made in isolated individual local programs throughout this country. Time, personnel and fiscal resources do not provide adequate opportunity, on a broad national scale, for inter-program visitation to share the means to bring together innovators and program planners. Institute Ten was viewed as an appropriate vehicle to achieve this goal.

Additionally, experience vividly demonstrates that existing information systems and dissemination services have serious limitations. Data which are assembled and stored are not easily retrieved and hence are not sought nor applied to significant local problems. Therefore, a definite need exists for appropriate sharing opportunities and the development of a relevant, functional data retrieval and dissemination system.

Objectives of the Institute

Seven major objectives were identified for this institute.

- (1) To examine and categorize the information services educators need in order to use research and other technical information in planning, implementing, and evaluating vocational education programs.
- (2) To assess the major active or planned information systems or services relevant to vocational education.
- (3) To identify gaps in present systems for acquiring, processing, announcing, disseminating, analyzing and interpreting educational report literature, particularly for documents generated by state and local educational agencies.
- (4) To develop alternative models for organizing needed services with potential for high cost/benefit returns, specifying information service roles, functions, and activities at local, intermediate, state, and multi-state levels.

(5) To test models using simulations or other appropriate data.

(6) To identify innovative practices which have specific application to metropolitan area programs of vocational education.

(7) To study viable innovations with respect to teaching techniques, program organization, program planning, area vocational schools, teacher education, and research or demonstration programs.

An early analysis revealed that the stated objectives were far beyond the scope of a one week institute. It became obvious early in the planning that any two of the objectives cited above were sufficient to provide an agenda for a full week institute. The decision was made to concentrate the institute on "identifying and sharing."

Outcomes

The desired outcomes are based on the stated objectives. The primary outcome was to share ideas, problems, and solutions, including the results of demonstration and pilot projects. A secondary outcome was concerned with identifying needed information services, including the development of a functional information service attuned to the need of local and state vocational education personnel.

General Plan of Operation

The institute utilized small and large group sessions. The consultants were selected from recognized authorities throughout the nation. Ample opportunity was provided for pertinent questions and group discussion with the consultants. The plan of operation included a review and analysis of existing information services with special emphasis on ERIC and RCU. Also, small group sessions were devoted to an assessment of needed additional information systems, a review of innovative programs, and demonstration and pilot-projects.

Adequate time was provided for thorough coverage of each topic including presentations, question, and discussion periods. Relevant instructional materials were provided, significant resources were identified and appropriate field trips were utilized. Simulation techniques were utilized and applied. Sufficient time was provided for in-depth individual dialogue with the consultants.

organizing nee
if returns di
activities b
levels

II. METHODS AND PROCEDURES

Nomination and Selection of Participants

The Temple University Metropolitan Area Institute staff in cooperation with the director of each institute, developed a plan for the nomination and selection of participants from the selected major metropolitan cities east of the Mississippi River which would provide:

1. a proper geographic representation
2. professional representation from the various vocational-technical fields at both state and local levels, including teacher educators and administrators of Research Coordinating Units and;
3. a representative team of decision makers selected from the administrative and supervisory staffs of the selected cities.

To accomplish the above, each State Director of Vocational Technical Education in each of the states east of the Mississippi River and the Territory of Puerto Rico was informed concerning the Institute by letter, brochure, and personal discussion. The cooperation of the State Directors, in identifying and nominating participants, was solicited. In addition, the superintendents of each of the selected major metropolitan cities was personally visited by a member of the institute staff for the purpose of discussing the overall goals of the institutes. Also, the goals of the institutes were reviewed relative to their relevance to inner metropolitan city vocational education problems and to encourage the nomination of appropriate decision making participants. A detailed description of the above process may be found in volume one of this report.

Participants were not only referred to Institute X as a result of the above procedure, but were also invited directly by the director of this institute. The local institutional effort relative to participant selection was coordinated with and complimented the total overall nomination and selection effort conducted by Temple University. A popular brochure describing Institute X, (see copy of brochure on page of appendix) and an institute application form which provided sufficient data for screening purposes (see page of appendix) was sent to each chief school administrator and each vocational director in each of the major metropolitan cities. (see page of appendix for a list of the major cities contacted).

Each potential participant was requested to complete a standard application form and return it to the director of Institute X. Fifty three (53) application forms were received and processed by the institute director.

Planning the Institute

The planning function, of a single institute or a series of institutes, is an extremely vital element in overall success. Good planning must involve numerous individuals and groups. The diversity of roles, relationships, expertise, and experiences, represent valuable input to an institute planning effort. Proximity and availability of planning personnel seriously influence the quality of the planning effort.

The general planning for Institute X originated with the Project Director and Associate Director, Temple University in the initial planning for all of the institutes. Much valuable and effective planning in terms of organizational structure, institute articulation, elimination of overlap and duplication, identification of general goals, the development of relevant ideas and suggestions, a participant selection matrix, and general operational policies were developed by the highly effective and efficient project staff at Temple University. Very early in the planning effort a briefing session for all institute directors was held at Temple. At this meeting valuable assistance was provided with respect to information and materials. Basic guidelines were provided, and significant institute coordination was achieved. Several follow-up meetings were held at Temple University.

The basic planning for Institute X was done by the local director, based on the guidelines provided by Temple University. However, the original institute consultants served as a planning committee, and were involved continuously in an advisory capacity. The following professional personnel were most active in the institute planning effort:

Dr. Byrl R. Shoemaker, Director
Division of Vocational Education
Ohio Department of Education
Columbus, Ohio

Dr. Jay Smink, Director
Pennsylvania Research Coordinating Unit
State Department of Education
Harrisburg, Pennsylvania

Dr. Albert Rindeau, Chief
Experimental and Pilot Projects
U. S. Office of Education
Washington, D. C.

Dr. Herbert Brum, Assistant
Director, Programs for Dis-
advantaged Youth
Ohio Department of Education
Columbus, Ohio

Mr. Darrell Ward, Specialist
State Leadership Program
Center for Vocational and
Technical Education
Ohio State University
Columbus, Ohio

Dr. Mary Lee Hurt
Research Specialist
U. S. Office of Education
Washington, D. C.

Mr. Carl Gorman, Director
Ohio E.P.D.A. Teacher
Education Project
Department of Vocational
Education
Kent State University
Kent, Ohio

Mr. Russell Gardner, Assistant
Director
Ohio Vocational Leadership
Development Program
Department of Vocational
Education
Kent State University
Kent, Ohio

Each of the individuals above was solicited for ideas and suggestions relevant to the following phases of the institute:

- a. Agenda topics
- b. Operational procedures
- c. Resource personnel
- d. Institute organization
- e. Institute goals and objectives
- f. Significant research studies
- g. Successful innovative programs

All of the original committee were contacted several times to provide adequate opportunity for input, feedback, and reaction to the suggestions of others.

The final planning was completed by the institute director. It was his responsibility to assimilate, analyze, evaluate, and select the detailed elements from the numerous recommendations.

Role of Consultants and Resource Personnel

The role of the consultants has been identified and reviewed in the preceding section of this report. The resource personnel were involved in the planning to a very limited degree. Suggestions were solicited, received, and utilized in the planning with respect to the nature and scope of presentations, the utilization of instructional materials, the role and direction of post-presentation conferences and discussion sessions and other aspects of their participation on the program.

The consultants and resource personnel were, of course, vitally involved in the implementation of the institute. The involvement took the form of making specific presentations, conducting conference and/or discussion sessions, and serving as small group leaders. The quality of the contribution of the consultants and resource personnel was excellent. The presentations were complete and interesting, the discussion sessions were stimulating and productive.

Conducting the Institute

The specific nature of the institute was modified, from the original design. The changes were based on the suggestions

and perceptions of the consultants, the goals and objectives of the institute, and the actual length of the institute. Early in the planning phase it was recognized that insufficient time was available in a one week institute to adequately explore and review existing information systems, identify needed information system services for local vocational programs, develop alternative information system models, test the models which were developed, review innovative vocational programs and experimental projects, and review research studies pertinent to vocational education in metropolitan areas. It soon became obvious that each of the elements identified above would be a worthy topic for a one week institute. However, it was decided that it would be impossible to accomplish all of the original goals in the prescribed time frame. Hence, the decision was made to devote the major emphasis to (1) a review of existing information systems, (2) a brief attempt to develop a more pragmatic information system model, and (3) a review of innovative vocational programs and experimental projects.

The opening session of the institute was devoted to the orientation of the participants. A member of the Temple University staff addressed the participants during the first session for the purpose of:

1. providing an overview of the total Metropolitan Area Institute Project.
2. presenting each participant with a brochure describing each of the institutes, their objectives, procedures, and possible outcomes.
3. identifying the anticipated impact on education programs and learning opportunities for youth and adults resulting from the multiple thrust of the institute series.

The local institute director provided an overview of Institute X and the proposed plan of operation was presented. The purpose and objectives of this specific institute were reviewed. Each of the participants was introduced informally and every effort was made to engender a professional spirit of mutual cooperation, group morale, and freedom of expression.

The next phase of the institute was devoted to an in-depth review of existing information systems. This review was accomplished by a series of highly professional presentations on the ERIC system and state Research Coordinating Units. The presentations were followed by discussion sessions and several small group work sessions. The discussion and small group sessions were designed to provide the opportunity for the identification of local problems concerned with data retrieval and dissemination, and to initiate the development of an information systems model.

The third phase of the institute was concerned with a review and analysis of successful, innovative programs in vocational education. The purpose of this sharing was to provide detailed information about specific programs that might be replicated in other local settings and/or provide an adequate base for modification and adaptation of feasible programs. Again, ample opportunity was provided for group discussion and interaction.

An additional opportunity was provided for an introduction to simulation techniques and the participants engaged in a sample simulation. A field trip to an inner city school was also included.

Orientation of Participants

The orientation procedures were described in some detail in the previous section. The orientation of participants was viewed as an integral part in conducting the institute. It was difficult to separate this aspect from the overall operation of the institute.

Abstracts of Presentations

The next portion of this report is devoted to an abstract of each major presentation developed by the institute staff from the formal papers presented. We are confident that the abstracts, which follow, will reflect the quality of the fine live presentations. The quest for brevity precludes the opportunity for a verbatim presentation of each address.

ABSTRACTS OF PRESENTATIONS

ERIC: AN INFORMATION SYSTEM

Mr. Roy Butler*

The ERIC (Educational Resources Information Center) is a national information system designed and supported by the U. S. Office of Education for providing ready access to results of exemplary programs, research and development efforts, and related information that can be used in developing more effective educational programs. Through a network of specialized centers or clearinghouses, each of which is responsible for a particular educational area, current significant information relevant to education is monitored, acquired, evaluated, abstracted, indexed, and listed in ERIC reference products. Through these reference publications any educator, anywhere in the country, has easy access to reports of innovative programs, conference proceedings, bibliographies, outstanding professional papers, curriculum-related materials, and reports of the most significant efforts in education research and development regardless of where they were first reported.

The ERIC Clearinghouse on Vocational and Technical Education (VT-ERIC), one of the clearinghouses in this decentralized network, is responsible for acquiring, processing, and disseminating-through the ERIC system-research reports, instructional materials, information analysis products, and other resource materials related to vocational and technical education. In addition to this general area, coverage includes the specific occupational fields of agricultural education, business and office occupations education, distributive education, health education, trade and industrial education, and new subprofessional fields. The Clearinghouse scope also encompasses the related fields of industrial arts education, manpower economics, occupational psychology, and occupational sociology. The following subject categories, when specifically oriented to vocational-technical education and its related fields, are included in the scope of the Clearinghouse: administrative and supervision, curriculum, employment and occupations.

*Mr. Butler is the Acquisition Specialist, ERIC Clearinghouse on Vocational and Technical Education, The Center for Vocational and Technical Education, The Ohio State University, Columbus, Ohio 43210.

evaluation and measurement, facilities and equipment, historical studies, individuals with special needs, instructional materials and devices, philosophy and objectives, research design, development and utilization, occupational guidance and other student personnel services, students, teachers, teacher education, teaching and learning.

Through central management, bibliographic information and abstracts of documents acquired by individual ERIC clearing houses are fed into a computerized system to generate the monthly issues of Research in Education (commonly referred to as RIE) and the Current Index to Journals in Education (commonly referred to as CIJE). In addition, a Semi-Annual Index and an Annual Index to RIE are published.

Many of the documents acquired and processed by VT-ERIC are reported in Research in Education (RIE). However, since RIE is aimed broadly at all of education and has a limitation on size, it is not possible to include many vocational education documents which are available and needed by the profession. Therefore, VT-ERIC publishes Abstracts of Instructional Materials in Vocational and Technical Education (AIM) and Abstracts of Research and Related Materials in Vocational and Technical Education (ARM). A yearly cumulative index of AIM and ARM is also published. AIM includes abstracts of instructional materials which are typically designed for teacher or student use. ARM contains abstracts of research and other resource materials.

All of these ERIC products can help you. ERIC publications can be used for:

- . Browsing-to scan each volume for reports and ongoing projects in various fields of interest.
- . Current awareness-to find out what has been written or what is now being done on a particular subject.
- . In-depth searching-to find everything in the ERIC system on a particular topic according to specific descriptors (search terms).

ERIC publications are designed so that, once familiar with the format of one, you will be able to use all others. They are indexed to offer a variety of approaches for finding information by:

- . Subject-to find documents and projects on a specific topic through the use of descriptors.
- . Author or Investigator-to find out what an author has written or to learn what an investigator is now doing.

- . Institution-to find out what an institution has published or what research projects are now being conducted at an institution.
- . Accession Number-to identify a document when only the clearinghouse number or ERIC number is available.

To enable readers to obtain the full text of documents cited in the reports section of the monthly issues of Research in Education, as well as other publications, ERIC has established the ERIC Document Reproduction Service (EDRS).

EDRS supplies copies of these documents in two forms:

- . Microfiche (MF)-4" x 6" sheet of microfilm on which 70 pages of text are reproduced.
- . Hard copy (HC)-reproduction of the document on paper at about 70 percent of the original size.

The cost of each document cited in Research in Education, both in hard copy and microfiche, appears in the citation. Document orders should include the complete accession number (e.g., ED number), type of reproduction (HC or MF), and the number of copies. Order from:

ERIC Document Reproduction Service (EDRS)
Leasco Information Products Company (LIPCO)
Post Office Drawer O
Bethesda, Maryland 20014

Other sources of Help - Since the quantity of materials in the data base is increasing at a rapid rate, VT-ERIC has evolved a programmatic approach to developing information analysis publications. Review and synthesis papers, as well as other information analysis products, have been written by scholars to capsule knowledge in specific substantive and problem areas.

Current review and synthesis publications focus on agricultural education, business and office education, distributive education, health occupations education, home economics education, industrial arts education, technical education, and trade and industrial education.

Other reviews published to date include problem and mission oriented products such as vocational education for the disadvantaged, economics of vocational and technical education, administration of vocational education, cooperative vocational education, and prevocational education. Some of these are fully developed and others are in the planning stages.

RCUs - Excellent help in using the products of the ERIC system may be available from your state research coordinating unit (RCU). Many research coordinating units have the ERIC microfiche collection and offer services which extend the vocational-technical education information dissemination effort.

You will find ERIC to be a helpful resource in solving many of your problems. I hope this brief presentation has helped you to become more knowledgeable about the breadth of information that can be utilized on a continuing basis. At the same time, you may be a contributor to the ERIC document base. If you have prepared a report, speech, or paper relating to the scope of VT-ERIC and you would like to have it considered for national dissemination through the ERIC system, send two copies to me. Our combined efforts will accrue to the benefit of education in this great country.

RESEARCH COORDINATING UNITS AS AN INFORMATION SYSTEM

Dr. Clayton Omvig*

The National System of Research Coordinating Units was established in 1965 to serve as the research arm for vocational and occupational research and development programs in the states. The responsibility of the RCU's extended along the entire continuum of vocational education, including the State University systems, the State Bureaus of Vocational Education, the area vocational schools, and local school districts. The intention was to bring together a research staff and supporting professional personnel in vocational education to provide the leadership, motivation, and coordination needed to create a favorable climate for research and related activities. The formulation of an RCU would not usurp the research responsibilities of university faculty, state department personnel, or other professional educators. Rather, the Unit would function to provide leadership, consultative services, and, in some cases, funds to coordinate and advance the research activities of vocational education within each state.

The RCU Staff

In discussing staffing patterns, I will use Kentucky as an example. The professional staff members were chosen so that each staff member had the major responsibility and competence to design, conduct and supervise research or related activities in one of the following areas:

(1) Manpower demands and requirements. This individual will be concerned with the range and kind of employment opportunities available to the people of Kentucky who will enter the labor force, the assessment of competencies needed for job entry and advancement on the job, and the unemployed youths and adults who need vocational and technical education as a basis for employment.

(2) Human resources development. This staff member will conduct research and related activities regarding the knowledge, skills, aspirations, and motivations of people who enter

*Dr. Clayton Omvig is Director of the Kentucky Research Coordinating Unit. University of Kentucky, Lexington, Kentucky 40506.

or who aspire to enter the labor force as they relate to the development of programs of vocational and technical education.

(3) Educational resources and needs. This person will be concerned with all factors that relate to the development of programs of vocational education, and related services, to meet evolving occupational needs and to increase and maintain the quality and effectiveness of ongoing programs.

(4) Information services. This individual will be responsible for the proper utilization of research findings in program development. He will give attention to collecting, interpreting, and disseminating research results which are important to educators in vocational and technical education.

(5) Education programs. This staff member will be concerned with the availability of competent professional persons needed to conduct effective programs of vocational and technical education and the ancillary services, and with the need for educational programs to maintain a sufficient supply of professional persons in all program areas. Also, develop and coordinate a program of research training for practicing and potential vocational educators resulting in better understanding and use of research in program improvement.

Activities of an RCU

The RCU is responsible to the state department of education for providing institutional research capabilities; research, consultative, and technical services; education in research methodology; and research and development dissemination programs. The mechanisms whereby these functions will be fulfilled are described in the various State Plans for Vocational Education.

The following activities have been formulated for the operation of our RCU:

1. Operational Research
 2. Contract Research
 3. Consultative Services
 4. Information Dissemination
 5. Coordination of Research
 6. Maintenance of an Occupational research-resource library
 7. Development of cooperative relationships
-
1. Small grants to individual teachers for purposes of program improvement.
 2. Periodic evaluation of State and local vocational education programs and services.

3. State level planning for the improvement of vocational education.
4. Research designed to obtain information regarding current projected manpower needs and job opportunities.
5. Experimental, developmental, and pilot programs and projects designed to test the effectiveness of research findings.
6. Special demonstration and dissemination projects.
7. Educational programs designed to familiarize persons involved in vocational education with research findings and successful pilot and demonstration projects in vocational education.
8. The development of new vocational education curricula.
9. Projects in the development of new careers and occupations.
10. Programs for persons with special needs.
11. Other research and demonstration projects undertaken for the expressed purpose of adding quality to the program of vocational education in the State.

Funds Allotted

Funds shall be allotted for the following purposes:

1. Research in vocational education;
2. Educational programs designed to familiarize persons involved in vocational education with research findings and successful pilot and demonstration projects in vocational education;
3. Experimental, developmental and pilot programs and projects designed to test the effectiveness of research findings;
4. Demonstration and dissemination projects;
5. The development of new vocational education curricula; and,
6. Projects in the development of new careers and occupations.

Services of an RCU

1. Provide technical and consultative assistance to the vocational education system of the State in the definition and conduct of operations and applied research, development, innovative, exemplary, and evaluation programs in vocational-technical education.

2. Provide the data retrieval and analysis services needed by the Bureau of Vocational Education in annual and long-range planning.

3. Assist the Bureau of Vocational Education in (2) the assessment of need for research and development activities, (b) the assignment of priorities to areas of need, (c) the evaluation of merit of proposed research, and (d) the monitoring and supervision of funded research.

4. Maintain liaison with agencies both within and outside the state which conduct research and development of significance to the program of vocational education in the state, with the aim of preventing unnecessary duplication of effort.

5. Develop and operate a program of selective dissemination of research and development-garnered information to persons in the field of vocational education in the state and to provide technical assistance and consultative services to those persons so as to facilitate the adoption of newer and better programs of vocational education.

6. Develop and coordinate a program of educational research training for practicing vocational educators which will result in their empathetic understanding of the value of educational research and an active interest on the educator's part of the implications of specific research for their programs.

7. Increase the active participation of professional persons in research and development endeavors which show promise of increasing the effectiveness of the vocational education programs of the state.

AN INNOVATIVE PROGRAM: THE MINNEAPOLIS WORK OPPORTUNITY CENTER

Dr. Michael P. Joseph*

The Minneapolis Work Opportunity Center is a unique educational venture. The Center provides a threefold program. One is designed for young people who have for some reason withdrawn from their regular high schools. Classes are also available for high school graduates who desire to learn a salable skill. An innovative curriculum for junior high school youth enables them to explore and participate in a variety of vocationally oriented experiences.

The Center is located in a non-school-like setting and functions with a modified modular schedule. Students are free to select their own classes from a wide variety of offerings including graphic arts, distributive education, dry cleaning, machine shop, small engine maintenance and repair, business subjects, electricity-electronics, service station-automotive maintenance, home economics, tailoring and handcrafts, nurses' aide and hospital orderly, food preparation and service, english, mathematics, social studies, reading, art, and music.

Teachers design a special program for each student and progress toward its completion is marked by frequent evaluation and reward. Transfer credits are granted at the completion of each course.

Counselors, social workers, community outreach workers, work coordinators, and the school nurse are all available for personal counseling, group services, program changes and job orientation.

Jobs, in line with the student's skills, are available upon completion of training. A return to a regular senior high school or graduation from high school are also goals which can be pursued in a relaxed atmosphere.

Student Characteristics

Many studies were conducted between 1966 and 1970 which were focused on student characteristics. Some of the more salient facts include: 26% have fathers who were breadwinners; 40% come from families with 1-3 children and 30% have 4-6 children; 40% attended from 3-10 elementary schools and 34%

*Dr. Michael P. Joseph is Director of the Minneapolis Work Opportunity Center, Minneapolis Public Schools, Minneapolis, Minnesota 55414.

attended 2-6 senior high schools; 65% have had help from a school or agency social worker and 11% have seen a psychiatrist; 60% have institutional records; reading level for boys=7.9 grade, that for girls=9.0; on the DAT Verbal Composite score, mean for the group was at the 27%ile of Minneapolis 9th graders; on the DAT Numerical the student mean was 25%ile.

WOC students view the future in many ways. Some see it as "finishing school;" others as "doomed;" and many as "undecided." At home they feel uneasy, "take it cool," or "feel uncomfortable." They perceive teachers as either patient, friends, rotten or great people. These were typical responses to some twenty open-ended items designed to discover student perceptions of self and others. In an Adjective Check List students were asked to rate themselves on 50 descriptive terms. The Checklist was administered on entrance to the WOC program and when the same people completed programs. Significant positive change was found in several areas. At the conclusion of their program, students saw themselves as more competent, productive, thorough, efficient, dependable, serious, logical, responsible, confident, practical, contented, reliable and careful.

Students who leave the program do so for various reasons: 33% secured employment commensurate with the skills learned at the Center; 16% moved; 12% transferred; 11% completed their objectives; and 11% left because of lack of interest in the program.

During 40 months of operation the following general statistics were accumulated:

- 2961 students registered
- 1925 completed programs
- 1250 placed on jobs
 - 140 completed work for a high school diploma
 - 172 returned to their home schools

OCCUPATIONAL TRAINING INFORMATION SYSTEM.

Dr. Paul Braden*

There has been little progress in developing solid "top management oriented" information systems and this has been particularly true relative to information systems designed to aid in planning for statewide vocational and technical education. However, Oklahoma has developed a comprehensive, statewide, and continuous system for matching manpower supply and demand. It is currently providing information on the supply of and demand for sub-professional manpower as the basis for improving decision making relative to manpower utilization in Oklahoma.

Basic Procedures

The basic procedures of OTIS were designed so that top management could obtain data they needed to produce more meaningful state plans for vocational and technical education instead of discovering, too late, that the system was designed to answer, for example, middle management concept of what the problems were. To provide the data on specific questions on an annual basis, OTIS was divided into the following six sub-systems:

1. Manpower Supply,
2. Manpower Demand,
3. Training Costs,
4. Graduate Follow-Up,
5. Identification of Underdeveloped Human Resources, and
6. Socio-Political involvements.

The primary emphasis of the system was directed towards interfacing manpower supply and manpower demand with the other sub-systems playing supporting role. The OTIS design calls for annual recycling of the data in order to provide vital information in time to affect a large portion of training program "starts" and "stops" which tend to occur in the fall of the year, particularly in the public training institutions. This supply and demand concept puts emphasis on product evaluation (what actually happens to graduates) and was difficult for many teachers and administrators to understand since evaluation in the past had concentrated on process evaluation (what happens during the training program).

* Dr. Paul Braden is Director of the School of Occupational and Adult Education at Oklahoma State University, Stillwater, Oklahoma 74074.

Summary

Many of the major goals of the development phase have been realized while many other areas need improvement; however, the lines of communication that have been established between the State Department of Vocational and Technical Education and other agencies during the last two years provide a good start towards overcoming any foreseeable obstacles. Hopefully, by coordinating training resources in both the public and private sectors better jobs and higher personal income will result for the citizens of Oklahoma.

A NEW APPROACH TO VOCATIONAL TEACHER EDUCATION

Mr. Carl Gorman*

INTRODUCTION

The Education Professions Development Act (EPDA) is a Federal Act administered by the U. S. Office of Education. It is designed to help local school systems, State educational agencies, colleges and universities, develop more effective ways to recruit, train, and utilize educational personnel. The Education Professions Development Act ties together a number of programs aimed at generally the same objective; the training and retraining of educational personnel. The EPDA is divided into six parts. It funds training programs for elementary personnel, through higher education personnel. The point I'm trying to make is that EPDA has fellowships and training projects at all levels and is not just concerned with Vocational Education. The EPDA Project here in the State of Ohio concerned with Vocational Education is the project I want to present to you today. At the conclusion of my presentation, I welcome any comments or suggestions you wish to make.

PRESENTATION

Training Project Title

A training program to prepare industrial personnel to become teachers of trade and industrial education.

Training Sites

1. E.P.D.A. Grant was awarded to the Ohio State Department of Education, Division of Vocational Education
2. The Central Administration was conducted through The Department of Vocational Education, Kent State University.
3. The consortium consisted of The University of Cincinnati, The University of Toledo, The Ohio State University and Kent State University.

*Mr. Carl Gorman is Assistant Professor and Director of the Ohio Vocational Teacher Development Project, Kent State University, Kent, Ohio 44242.

Purpose of Project

1. Attract qualified individuals from industry who possess the technical competencies.
2. To prepare the craftsman to assume vocational teaching responsibilities.
3. Better utilization of teacher educators services.

Need

With the increase in students and programs resulting from continued expansion of vocational education, all of you, I am sure, are aware of the problems of recruiting and training potential teachers.

Present System of Teacher-Education

7 years of industrial experience.
A one-week pre-service workshop.
Teacher visitation on a bi-weekly basis for two (2) years.
Two years of campus courses (minimum of 2 courses in T & I Education each year.)

Compare that system with the EPDA system

7 years of industrial experience.
6 weeks pre-service institute.
Teacher visitation of a bi-weekly basis for one year.
10 Seminars (on campus) 3 hours in length.
Second year - 2 courses in T & I on campus.

Eligibility

To be eligible, the participants must have had

1. A full time teaching assignment in an in-school day trade T & I program.
2. Be qualified to hold a temporary vocational certificate as outlined in the State Plan.
3. Never have attended a pre-service workshop.
4. Never have held a Bachelor's Degree in Education.

Program not designed for Cooperative Education teachers

Certification Credit

6 weeks institute = 100 clock hours=
8 quarter hours.
1 year in-service = 50 clock hours=
4 quarter hours (Individual problems solved and completed occupational analysis).
Second year in-service - 2 courses=
50 clock hours=4 quarter hours.
Both courses must be in T & I Education, one of which is Course of Study Construction.
Total - 200 clock hours = 16 quarter hours.

EPDA allows more teacher educator contact hours than does the old system.

Stipend

\$75.00 per week for six weeks.
\$15.00 per week for each eligible dependent.
8 hours of college credit waived.
No allowance for travel or books.

Program Operation

The program pattern was established to provide as much application and teaching practice as could be arranged. The morning sessions were devoted to instruction and information giving. The afternoon sessions were devoted to developing materials for the teacher's own use and applying the knowledge gained from the morning sessions.
Example - morning sessions-
"Instruction Sheets and Their Uses" - Afternoon session -
"Developing Instruction Sheets" for the First 6 weeks of School.

SIX WEEKS INSTITUTE

Unique features of instruction, which were used:

Methods of Instruction

Developmental
Lecture
Demonstration
Individual

Immediate Application

Developing of Lesson Plans
Progress Charts
Information Sheets, etc.

Use of Consultants

Academic personnel used to cover specialized areas-EXAMPLE:
Psychology-Principles of Learning, Psychology of the Adolescent; Motivation

Administration; School Liability
Audio-Visual - Transparencies, Use of Media Equipment

Local Teachers and Administrators

Resource personnel and specialized areas
Shop Management, discipline (small groups)

State Staff Personnel

State Structure - Acquaintance with state director and assistant director.

VTR - Video Tape Recording

Portable equipment (camera, recorder, monitor)

How used

Enabled analysis of both related and manipulative lessons by participants and project staff.

Critique

10 Minute demonstration
10 Minute related lesson
Filming in local schools

Field Trip to J.V.S. and Comprehensive

1. See facility
2. Presentation by director, supervisors, and guidance personnel
3. Demonstrations on real equipment
4. Roll Playing

Developing Materials

1. Direct Application
2. Prepare materials for the first six weeks of school
3. Individualized instruction

Return to Local School

1. Orientation with local administrator
2. Definite assignment given
 - a. Fire drill procedure
 - b. Attendance
 - c. Requisition of supplies
3. Teacher educator visit prior to opening of school

I am sure all of the above features are not unique to the program. However, because of the limited time in a one-week pre-service workshop, it would be impossible to offer the depth and breadth of instruction, which we were able to offer through this program. One of the directors told me that the program is more than six times better than the present system.

Comments from Participants: (Most comments were positive)

1. "Felt very appreciative of chance to participate in program. Afraid this year would have been most apprehensive without it."
2. "I am not sure how effective I'll be as a teacher, but I do have a lot more confidence in myself thanks to you and the program."
3. "All in all, I don't see how I could have taught without this six weeks."
4. "More time should be available for questions. There should be more panels of teachers that had only taught one year because these people have their problems fresh in their minds and can relate them better."
5. "The program as I see it has been very complete. The only thing I believe there should be more of is testing and evaluation."

Problems of Institute

1. Major problem was getting participants enrolled in program.
2. Informing those people who do the hiring of teachers as to the advantages of the program.
3. Getting participants to leave industry for six weeks to attend an institute.

A SYSTEMS APPROACH TO PROGRAM PLANNING

Dr. Jay Smink*
and
Dr. James McNamara**

The Pennsylvania Vocational Education Study was planned primarily as a pragmatic overview and analysis of vocational, technical and continuing education program in the Commonwealth over the past five years, 1964 through 1968, with a view toward determining its achievements, deficiencies and direction in the light of priority needs of the people and employers. The guidelines for the study were based on the thirteen goals for vocational and technical education approved by the State Board of Education in March, 1966. The study was not intended or planned as a basic research project to analyze philosophical issues in vocational education.

More specifically the study was addressed to an analysis of the operating program since the passage of the Vocational Education Act of 1963, to determine what its direction was in the light of the economic trends and manpower needs of the State and what the projected program needs and costs might be up to 1975. Therefore, there was a minimum of philosophical treatment of vocational education and an emphasis upon systematic planning for a total unified manpower development program for the future. The emphasis was placed on "what is needed" and "how can it be accomplished", rather than "why should it be done".

The study was committed to the use of existing important relevant data and information in making essential analyses and projections. It was agreed by all concerned early in the study, that the result should not be a report which might be read casually and filed away until a next study was conducted. Neither

*Dr. Jay Smink is Director of the Pennsylvania Research Coordinating Unit, Pennsylvania State Department of Education, Harrisburg, Pennsylvania 17126

**Dr. James F. McNamara is Research Associate in the Pennsylvania Research Coordinating Unit, Pennsylvania State Department of Education, Harrisburg, Pennsylvania 17126

should it be a study of some partial aspect of vocational education so that the relationship of the program to other important training programs was not made clear. This was the general history and outcome of the several previous studies conducted in the past.

As this study progressed, several aspects took on increasing importance and value. First, in view of the peculiar socioeconomic history of Pennsylvania it seemed important that educators and vocational educators should be informed about the economic competitive posture of the State, especially with implications for vocational and technical education. Secondly, it was felt that the study should develop a planning pattern which would require continuous updating of data and information so that the State Board and the Department of Public Instruction could always have available the most recent reliable basis for planning, evaluating, redirecting older programs, and developing new programs to attain short and long range goals. Along with this decision it was also agreed that there should be designed and applied a structured systematic approach to continuous State-local planning (as contrasted with intermittent planning) of annual and long range occupational education programs in the light of all citizens' socioeconomic needs and identified trained manpower supply and demand.

Since this is the first such large scale attempt made in the State, there are undoubtedly gaps and deficiencies in this study. In a number of instances, sub-studies had to be sharply delimited because of the lack of time and the urgent need for results to be timed with the implementation of the Vocational Education Amendments of 1968, P.L. 90-576. In other cases, certain methods of projecting economic trends, manpower demands and needs, and program costs were chosen as against other methods which might be just as appropriate and reliable. It is very important, therefore, that the study of the manpower development programs in Pennsylvania be continued, making necessary adjustments and revisions, by the Research Coordinating Unit with the active cooperation and assistance of the Bureau of Research, the Bureau of Vocational, Technical and Continuing Education and other involved State and Federal agencies.

With the preceding as a background, it should be helpful to review briefly the nature and pattern of the report. Section I is devoted to a five year analysis of enrollments and expendi-

tures in vocational-technical and continuing education, 1964, the first fiscal year of the Vocational Education Act of 1963 (without funding) through the fiscal year 1968, the last fully reported program year. Included in the analysis is a general appraisal of the current program and its direction in the light of existing and projected labor force needs in Pennsylvania. It was not possible in this undertaking to make a thorough, in-depth evaluation of the quality of instruction in the existing program. This should become readily possible in the immediate years ahead.

In Section II, economic and projected trends of the Pennsylvania economy were analyzed and described. This analysis is not intended as a fine treatment for professional economists, but rather as a study of the important relevant economic information and trends for vocational, technical and adult education planning purposes. By this means, it is expected that vocational education could be more purposefully planned so that training programs might become attuned to the continued improvement of the economy in their communities and in the State as a whole. Another purpose of the economic analysis was to involve educators and vocational educators more directly in the business and industrial development of their communities and the State. In the future, program plans prepared and submitted by vocational educators could be measured more carefully and thoroughly in terms of an improved social and economic environment. In this way vocational, technical and continuing education could in fact become an economic asset to the Commonwealth.

Section II also identifies and describes briefly nine principal occupational training agencies and programs. The output of their graduates in 1967 became an important part of projecting the unmet occupational training needs by 164 classifications, State-wide, and for each of the 67 counties in the State. Therefore, Section II furnishes the basis for program planning and implementation dealt with in Section III.

Section III, along with Section II, forms the keystone to the whole study and report. A systems approach to vocational and technical education program planning is explained and described in detail. Five charts and five forms were designed and applied in part in a local situation, the Cumberland-Perry Counties area, to illustrate this approach. The idea here was not to "sell" the systems approach as such, but rather to provide a sound method for making decisions in the final selection

of programs from various feasible alternatives. Also included are recommendations for a State organization and administration that would be needed to implement the systematic planning procedures as well as the other important functions of the State program.

Section IV identified the principal difficulties in reporting procedures and provides recommendations for improving these administrative activities. Also revealed were some of the weaknesses in the present financial aid policies, especially in the light of the new policies required under P.L. 90-576. Certain recommendations suggest revision of legislation and the need for a formula for determining allocations of funds to local districts in the future.

Section V gives an overview of ancillary services and activities over the past five years. This section was devoted primarily to reports of two major ancillary services of the utmost importance in the growing vocational education programs, teacher education and certification, and vocational guidance services. Both of these services, along with research activities and curriculum development, are fundamental to the ultimate success of the program.

Section VI was devoted to an account of five special studies that were conducted, namely, the two large cities, Philadelphia and Pittsburgh; special socioeconomic needs; a follow-up system of graduates; an employer survey; and a survey of local vocational education administrators. All of these special studies contributed to a well-rounded report and strongly based conclusions and recommendations.

The conclusions and recommendations were synthesized and summarized to conclude the report. The summary also proposes overall projected program expansion to bring the annual supply of trained manpower more nearly into agreement with the projected demand, and describes a method for estimating annual costs up to 1975. Implementation of the program expansion, wholly or in part, will bring about a substantial contribution to the general welfare of the people and the Commonwealth.

THE OHIO JOINT VOCATIONAL SCHOOL DISTRICT: A CONCEPT

Dr. Byrl R. Shoemaker*

Much has been said and written throughout our nation since the passage of the Vocational Education Act of 1963, relative to the need for vocational schools that serve youth and adults in a wide geographical area. Various states have devoted extensive time and effort to the development of "area schools". Each state has developed an area concept and an organizational structure designed to meet the unique educational needs of that state.

In meeting this need, Ohio has developed the Joint Vocational School District. Legislation which permitted the creation of joint districts was passed in Ohio in 1964. This concept is based on the following rationale.

1. Ohio youth and adults are entitled to a comprehensive program of vocational education.
2. A comprehensive program of vocational education must possess adequate financial resources based on a sufficient tax base.
3. A comprehensive program of vocational education must possess adequate enrollment based on a sufficient student base.

The Joint Vocational School concept devoted appropriate consideration to the above rationale. This concept provides the basis for meeting the needs of large, intermediate, and small school districts in our state.

The Joint Vocational School District represents a legal joining together of school districts to create a new and separate district. The Joint Vocational School District is a legal taxing authority independent of the other taxing authorities in the local school districts. Each district in the join-

*Dr. Byrl R. Shoemaker is Director, Division of Vocational Education, Ohio State Department of Education, Columbus, Ohio.

ture votes on a bond issue for the construction of vocational facilities and a tax levy to finance the operation of the educational programs.

The pooling of student populations of each of the participating local schools provides an adequate base from which to recruit and select students. The participating schools send students to the Joint Vocational School based on a quota or an open admission policy. The specific policy is established by the "J.V.S." board. Students are transported by the "home" school to the J.V.S. All students remain members of the home school, participate in athletics and extra curricular activities, and graduate from the home school.

The Joint Vocational School is not a chartered high school, grants no diplomas, sponsors no athletic teams, and provides no band or orchestra. The J.V.S. is viewed as a vocational center which represents an extension of the curriculum of each of the participating high schools. Broader curricula offerings are available for each student as a result of "joining forces".

The tax payers of each J.V.S. district are expected to provide 50% of the funds for construction with the remaining 50% coming from State and Federal construction funds. Operating costs are supported by a combination of state and local funds. At present, thirty-five J.V.S. districts have been formed and approved by the State Department of Education. Fifteen are now constructed and in operation. Five more are under construction and are expected to open next school year.

The Joint Vocational School concept effectively serves the needs of the youth and adults of our state. Additionally, these schools meet a vital manpower need for the businesses and industries of Ohio.

Research studies indicate a high degree of student satisfaction with the jointure concept and the educational opportunities they provide. Manpower Development and Training programs, adult extensions, and apprenticeship programs have provided additional educational opportunities for the citizens of the Joint Vocational School Districts.

III EVALUATION OF INSTITUTE

Evaluation Procedures

This section of the report deals with the various elements of the institute evaluation. In the interest of clarity the evaluation data is presented in three (3) major phases.

The first phase is concerned with a statistical and a narrative summary of the results of "Institute Evaluation Form I." Data relative to both the pre-test and the post-test are presented. These data are followed by a comparison of the pre-test and post-test results including a review of the degree of change from pre-test to post-test.

The second phase is devoted to a statistical and narrative summary of the data provided by "Institute Evaluation Form II." These data are supplemented by a descriptive summary of the subjective aspect of the evaluation form. An analysis of the results of "Institute Evaluation Form II" is considered essential to an effective evaluation of the Institute. Form II provides the only detailed data relative to the participants perception of the nature and value of the institute.

The third major phase presents a summary of the data which was gathered by means of the follow up questionnaire. The follow-up study was conducted six (6) months after the institute. The follow-up study was devoted to assessing the degree to which the participants planned to or had implemented the knowledge and ideas gained during the institute. The true test of this institute can be measured by the extent to which the institute content is implemented and utilized at the local, state or university level.

Evaluation Form I

The "Evaluation Form I" was designed to determine participants opinions regarding a set of sixty seven (67) principles or basic beliefs about vocational education in our contemporary society. The pre-test was utilized to determine the nature of the participants opinions or beliefs prior to any institute presentations. The pre-test represents a "bench mark" which can be used as a basis for further measurement of change. The post-test was administered after the final presentation on the last day of the institute. By comparing the responses on the pre-test with those on the post-test, a measure of the degree of change in attitude or belief can be obtained. Theoretically this change can, to a large extent, be attributed to the affects of Institute 10.

Table I summarizes the results of the participant response to "Institute Evaluation Form I Pre-Test". An additional category "no response" was added for tabulation purposes. Table I includes the number of participants and the corresponding percentage of responses for each category. It is interesting to note that ten (10) items received no response.

TABLE I
Summary of Institute Evaluation Form I
(Pre-Test)

Item No.	Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree		No Resp
	No.	%	No.	%	No.	%	No.	%	No.	%	
1	10	52.63	9	47.37	0	0	0	0	0	0	0
2	0	0	3	15.79	0	0	10	52.63	6	0	0
3	7	36.84	10	52.63	1	5.26	1	5.26	0	0	0
4	9	47.37	8	42.10	0	0	1	5.26	1	5.26	0
5	1	5.26	0	0	1	5.26	13	68.42	4	21.05	0
6	0	0	0	0	0	0	12	63.16	7	36.84	0
7	0	0	0	0	0	0	7	36.84	12	63.16	0
8	1	5.26	4	21.05	2	10.53	8	42.10	4	21.05	0
9	0	0	1	5.26	1	5.26	13	68.42	4	21.05	0
10	0	0	1	5.26	1	5.26	10	52.36	7	36.84	0
11	8	42.10	9	47.37	1	5.26	1	5.26	0	0	0
12	7	36.84	7	36.84	1	5.26	4	21.05	0	0	0
13	5	26.31	13	68.42	1	5.26	0	0	0	0	0
14	3	15.79	12	63.16	0	0	2	10.53	2	10.53	0
15	0	0	2	10.53	3	15.79	11	57.89	3	15.79	0
16	3	15.79	8	42.10	2	10.53	6	31.58	0	0	0
17	4	21.05	8	42.10	3	15.79	4	21.05	0	0	0
18	0	0	1	5.26	4	21.05	11	57.89	3	15.79	0
19	1	5.26	14	73.68	1	5.26	3	15.79	0	0	0
20	0	0	0	0	0	0	5	26.31	14	73.68	0
21	7	36.84	7	36.84	1	5.26	3	15.79	1	5.26	0
22	7	36.84	8	42.10	1	5.26	0	0	1	5.26	0
23	0	0	2	10.53	3	15.79	7	36.84	7	36.84	0
24	3	15.79	12	63.16	1	5.26	3	15.79	0	0	0
25	1	5.26	6	31.58	3	15.79	8	42.10	1	5.26	0
26	0	0	7	36.84	8	42.10	4	21.05	0	0	0
27	0	0	3	15.79	4	21.05	10	52.63	2	10.53	0
28	1	5.26	15	78.95	0	0	3	15.79	0	0	0
29	1	5.26	7	36.84	4	21.05	7	36.84	0	0	0
30	2	10.53	15	78.95	0	0	2	10.53	0	0	0
31	0	0	0	0	2	10.53	12	63.16	5	26.31	0
32	3	15.79	15	78.95	0	0	1	5.26	0	0	0
33	1	5.26	2	10.53	6	31.58	7	36.84	3	15.79	0
34	2	10.53	8	42.10	6	31.58	2	10.53	1	5.26	0
35	0	0	0	0	0	0	16	84.21	3	15.79	0
36	0	0	5	26.31	2	10.53	8	42.10	4	21.05	0
37	1	5.26	7	36.84	6	31.58	5	26.31	0	0	0
38	0	0	0	0	3	15.79	11	57.89	5	26.31	0
39	2	10.53	5	26.31	0	0	10	52.63	2	10.53	0
40	2	10.53	8	42.10	2	10.53	7	36.84	0	0	0
41	1	5.26	12	63.16	3	15.79	2	10.53	1	5.26	0
42	5	26.31	12	63.16	2	10.53	0	0	0	0	0
43	0	0	0	0	1	5.26	11	57.89	7	36.84	0
44	0	0	2	10.53	4	21.05	9	47.37	4	21.05	0

TABLE I (cont'd)

Item No.	Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree		No Response	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
45	0	0	1	5.26	0	0	14	73.68	4	21.05	0	0
46	0	0	8	42.10	6	31.58	5	26.31	0	0	0	0
47	0	0	3	15.79	0	0	12	63.16	4	21.05	0	0
48	0	0	0	0	0	0	11	57.89	8	42.10	0	0
49	0	0	1	5.26	0	0	10	52.63	8	42.10	0	0
50	4	21.05	11	57.89	2	10.53	2	10.53	0	0	0	0
51	1	5.26	6	31.58	3	15.79	9	47.37	0	0	0	0
52	0	0	2	10.53	4	21.05	11	57.89	2	10.53	0	0
53	0	0	6	31.58	5	26.31	4	21.05	3	15.79	1	5.26
54	0	0	0	0	0	0	11	57.89	8	42.10	0	0
55	1	5.26	6	31.58	3	15.79	6	31.58	2	10.53	1	5.26
56	1	5.26	0	0	2	10.53	10	52.63	5	26.31	1	5.26
57	1	5.26	10	52.63	1	5.26	5	26.31	1	5.26	1	5.26
58	0	0	7	36.84	2	10.53	9	47.37	0	0	1	5.26
59	1	5.26	7	36.84	4	21.05	6	31.58	0	0	1	5.26
60	3	15.79	12	63.16	3	15.79	0	0	0	0	1	5.26
61	1	5.26	7	36.84	7	36.84	3	15.79	0	0	1	5.26
62	0	0	3	15.79	6	31.58	8	42.10	1	5.26	1	5.26
63	0	0	17	89.47	1	5.26	0	0	0	0	1	5.26
64	0	0	1	5.26	5	26.31	10	52.63	3	15.79	0	0
65	0	0	9	47.37	4	21.05	6	31.58	0	0	0	0
66	0	0	10	52.63	6	31.58	3	15.79	0	0	0	0
67	0	0	2	10.53	3	15.79	13	68.42	1	5.26	0	0

Table II reveals a summary of the results of the participants response to "Institute Evaluation Form I Post-Test. An additional category entitled "no response" was added to the original five (5) for tabulation clarification. Table II shows the number of participants and the percentage of participants response for each item and category. In comparison it should be noted there were no items for which there was no response, as compared with ten (10) items on the pre-test.

The data contained in Table II provides a valuable base for comparing change in attitude. As indicated earlier, due to the nature and timing of the administration of the pre-test and post-test, there is a basis for hypothesizing that some degree of the change can be attributed to the experiences gained during the institute. A cursory analysis will reveal a general change. A later table will isolate the degree of change in attitude in a more specific manner.

TABLE II

Summary of Institute Evaluation Form I
(Post-Test)

Item No.	Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree		No Response	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
1	11	57.89	7	36.84	1	5.26	0	0	0	0	0	0
2	0	0	2	10.53	1	5.26	8	42.10	8	42.10	0	0
3	7	36.84	9	47.37	0	0	2	10.53	1	5.26	0	0
4	9	47.37	8	42.10	1	5.26	0	0	1	5.26	0	0
5	0	0	0	0	3	15.79	10	52.63	6	31.58	0	0
6	0	0	2	10.53	0	0	8	42.10	9	47.37	0	0
7	0	0	0	0	0	0	7	36.84	12	63.16	0	0
8	0	0	2	10.53	4	21.05	8	42.10	5	26.31	0	0
9	0	0	0	0	1	5.26	8	42.10	10	52.63	0	0
10	0	0	3	15.79	0	0	11	57.89	5	26.31	0	0
11	11	57.89	7	36.84	1	5.26	1	5.26	0	0	0	0
12	7	36.84	7	36.84	1	5.26	3	15.79	1	5.26	0	0
13	7	36.84	12	63.16	0	0	0	0	0	0	0	0
14	6	31.58	11	57.89	0	0	1	5.26	1	5.26	0	0
15	0	0	3	15.79	2	10.52	11	57.89	3	15.79	0	0
16	3	15.79	12	63.16	0	0	4	21.05	0	0	0	0
17	3	15.79	7	36.84	2	10.53	7	36.84	0	0	0	0
18	0	0	1	5.26	1	5.26	11	57.89	6	31.58	0	0
19	3	15.79	13	68.42	1	5.26	2	10.53	0	0	0	0
20	0	0	0	0	0	0	6	31.58	13	68.42	0	0
21	2	10.53	12	63.16	1	5.26	4	21.05	0	0	0	0
22	9	47.37	8	42.10	0	0	2	10.53	0	0	0	0
23	0	0	1	5.26	0	0	9	47.37	9	47.37	0	0
24	6	31.58	10	52.63	1	5.26	1	5.26	1	5.26	0	0
25	0	0	4	21.05	2	10.53	11	57.89	2	10.53	0	0
26	2	10.53	11	57.89	3	15.79	3	15.79	0	0	0	0
27	0	0	5	26.31	3	15.79	11	57.89	0	0	0	0
28	1	5.26	15	78.95	0	0	3	15.79	0	0	0	0
29	0	0	8	42.10	4	21.05	7	36.84	0	0	0	0
30	3	15.79	14	73.68	0	0	1	5.26	1	5.26	0	0
31	0	0	1	5.26	1	5.26	10	52.63	7	36.84	0	0
32	6	31.58	12	63.16	1	5.26	0	0	0	0	0	0
33	2	10.53	1	5.26	2	10.53	8	42.10	6	31.58	0	0
34	2	10.53	8	42.10	6	31.58	3	15.79	0	0	0	0
35	0	0	0	0	0	0	10	52.63	9	47.37	0	0
36	1	5.26	5	26.31	0	0	12	63.16	1	5.26	0	0
37	2	10.53	8	42.10	4	21.05	5	26.31	0	0	0	0
38	0	0	0	0	1	5.26	12	63.16	6	31.58	0	0
39	2	10.53	5	26.31	1	5.26	9	47.37	2	10.53	0	0
40	3	15.79	11	58.79	3	15.79	2	10.53	0	0	0	0
41	4	21.05	10	52.63	3	15.79	2	10.53	0	0	0	0
42	5	26.31	13	68.42	1	5.26	0	0	0	0	0	0
43	0	0	0	0	2	10.53	10	52.63	7	36.84	0	0

TABLE II (Cont'd)

Item No.	Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree		No Response	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
44	0	0	3	15.79	2	10.53	10	52.63	4	21.05	0	0
45	0	0	1	5.26	1	5.26	13	68.42	4	21.05	0	0
46	1	5.26	10	52.63	5	26.31	2	10.53	1	5.26	0	0
47	0	0	1	5.26	1	5.26	13	68.42	4	21.05	0	0
48	0	0	1	5.26	0	0	10	52.63	8	42.10	0	0
49	0	0	2	10.53	0	0	10	52.63	7	36.84	0	0
50	5	26.31	9	47.37	0	0	3	15.79	2	10.53	0	0
51	2	10.53	7	36.84	2	10.53	8	42.10	0	0	0	0
52	0	0	3	15.79	3	15.79	10	52.63	3	15.79	0	0
53	0	0	4	21.05	1	5.26	12	63.16	2	10.53	0	0
54	0	0	0	0	1	5.26	12	63.16	6	31.58	0	0
55	1	5.26	4	21.05	2	10.53	10	52.63	2	10.53	0	0
56	0	0	3	15.79	0	0	10	52.63	6	31.58	0	0
57	1	5.26	7	36.84	1	5.26	8	42.10	2	10.53	0	0
58	0	0	3	15.79	2	10.53	14	73.68	0	0	0	0
59	0	0	8	42.10	3	15.79	8	42.10	0	0	0	0
60	5	26.31	13	68.42	1	5.26	0	0	0	0	0	0
61	1	5.26	8	42.10	3	15.79	7	36.84	0	0	0	0
62	0	0	3	15.79	7	36.84	9	47.37	0	0	0	0
63	2	10.53	15	78.95	1	5.26	1	5.26	0	0	0	0
64	0	0	2	10.53	2	10.53	14	73.68	1	5.26	0	0
65	1	5.26	6	31.58	2	10.53	9	47.37	0	0	0	0
66	2	10.53	11	57.89	2	10.53	2	10.53	2	10.53	0	0
67	0	0	1	5.26	1	5.26	12	63.16	5	26.31	0	0

Table III presents a comparison of the pre-test and post-test data. For comparison purposes an arbitrary value was assigned to each of the categories on the original form the "no response" category. The Strongly Agree column was assigned a value of 5, the Agree column was assigned the value of 4, the Undecided column a value of 3, the Disagree column a value of 2, the Strongly Disagree column a value of 1, and the No Response column a value of 0. It should be clarified at this point that the writer is keenly aware of the fact that for some items the Strongly Disagree response was the appropriate response, hence, should be weighted with a value of 5. However, it was considered inappropriate for the writer to assume the prerogative of determining the true and correct response. If the same values are applied in all cases, the degree of change will be consistent. Utilizing these assigned values a mean score was computed for each item for both the pre-test and the post-test.

Column 3 of Table III indicates the net change between the mean value of the pre-test and the post-test. If the post-test mean was greater than the pre-test mean the change was identified with a plus sign. If the post-test mean was less than the pre-test mean the change was identified with a minus sign. It should be understood that the plus sign does not indicate a better value, nor does the minus sign indicate a poorer value.

Column 4 indicates the rank order of change based on the greatest net change without regard to plus or minus signs. The item with the greatest net change was ranked number 1, the item with the second greatest net change was ranked number 2. This pattern was applied consistently to all items.

TABLE III

Comparison of Pre-Test and Post-Test Data

	Pre-Test Mean Score	Post-Test Mean Score	Net Change	Rank Order of Change
1	4.52	4.52	0.00	64
2	2.00	1.84	-0.16	40.5
3	4.21	4.00	-0.21	32
4	4.21	4.26	+0.05	56.5
5	2.00	1.84	-0.16	40.5
6	1.63	1.74	+0.11	45.5
7	1.37	1.37	0.00	64
8	2.47	2.16	-0.31	18.5
9	1.95	1.53	-0.42	8
10	1.79	2.05	+0.26	24
11	4.26	4.63	+0.37	11
12	3.89	3.84	-0.05	56.5
13	4.21	4.37	+0.16	40.5
14	3.63	4.05	+0.42	8
15	2.21	2.26	+0.05	56.5
16	3.42	3.74	+0.32	14.5
17	3.63	3.32	-0.31	18.5
18	2.16	1.84	-0.32	14.5
19	3.68	3.89	+0.21	32
20	1.26	1.32	+0.06	50.5
21	3.84	3.63	-0.21	32
22	3.74	4.26	+0.52	3
23	2.00	1.63	-0.37	11
24	3.79	4.00	+0.21	32
25	2.89	2.42	-0.47	4.5
26	3.16	3.63	+0.47	4.5
27	2.42	2.68	+0.26	24
28	3.74	3.74	0.00	64
29	3.11	3.05	-0.06	50.5
30	3.89	4.68	+0.79	1
31	1.84	1.79	-0.05	56.5
32	4.05	4.26	+0.21	32
33	2.53	2.21	-0.32	14.5
34	3.42	3.47	+0.05	56.5
35	1.84	1.53	-0.31	18.5
36	2.42	2.63	+0.21	32
37	3.21	3.37	+0.16	40.5
38	1.89	1.74	-0.15	44
39	2.74	2.79	+0.05	56.5

TABLE III (cont'd)

Comparison of Pre-Test and Post-Test Data

	Pre-Test Mean Score	Post-Test Mean Score	Net Change	Rank Order of Change
40	3.26	3.79	+0.53	2
41	3.53	3.84	+0.31	18.5
42	4.16	4.21	+0.05	56.5
43	1.68	1.74	+0.06	50.5
44	2.21	2.21	0.00	64
45	1.89	1.95	+0.06	50.5
46	3.16	3.42	+0.26	24
47	2.11	1.95	-0.16	40.5
48	1.58	1.68	+0.10	47.5
49	1.68	1.84	+0.16	40.5
50	3.89	3.63	-0.26	24
51	2.95	3.16	+0.21	32
52	2.32	2.32	0.00	64
53	2.63	2.37	-0.26	24
54	1.58	1.74	+0.16	40.5
55	2.74	2.58	-0.16	40.5
56	1.89	2.00	+0.11	45.5
57	3.11	2.84	-0.27	21
58	2.74	2.42	-0.32	14.5
59	3.00	3.00	0.00	64
60	3.79	4.21	+0.42	8
61	3.16	3.16	0.00	64
62	2.47	2.68	+0.21	32
63	3.74	3.95	+0.21	32
64	2.21	2.26	+0.05	56.5
65	3.16	2.79	+0.37	11
66	3.37	3.47	+0.10	47.5
67	2.32	1.89	-0.43	6

Thirty seven items, 55.22%, indicated a post-test mean, greater than the pre-test mean. Twenty three items, 34.33% showed a post-test mean that was less than the pre-test mean. Seven items, 10.45%, revealed no change in mean from pre-test to post-test. These data reflect some change for 89.55% of the items.

Table IV identifies the top twelve (12) items, in terms of amount of net change. The items are identified by number, item and amount of net change. No attempt has been made to distinguish the nature of the change.

TABLE IV

INSTITUTE EVALUATION FORM I ITEMS WITH GREATEST CHANGE

Item Number	Item	Net Change
30	Youth are being educationally shortchanged due to inadequate vocational offerings.	0.79
40	The vocational education curriculum provides a better preparation for more jobs than does the college preparatory curriculum	0.53
22	The importance of vocational education cannot be emphasized enough to the lay public.	0.52
25	Funds allocated in the school budget to vocational education should be in proportion to those students who enter the labor market from school.	0.47
26	The national per capita income is adversely affected as public support for vocational education declines.	0.47
*67	Major metropolitan cities, because of the size, quality, and diversity of their professional staff, provide adequate research in vocational education to meet their needs.	0.43
9	Vocational education should not be in the high school because its skilled teacher qualifications, scheduling, and curricula are so different from regular high school requirements.	0.42
14	Vocational education contributes the solution of unemployment.	0.42
*60	The various vocational research centers in the U.S.A. should request assistance from the State and Local Directors of Vocational Education in getting research problems.	0.42
11	The importance of vocational education cannot be emphasized enough to the general educators.	0.37
23	The general education curriculum is the best preparation for entry into an occupation upon graduation from high school.	0.37
*65	It is almost impossible for the local directors of vocational education to find out what is available in vocational curriculum construction.	0.37

In reviewing the items in Table IV it readily becomes apparent that all of the items listed were of such a nature that a direct relationship exist between the content of institute X and the specific items. Three (3) of the twelve (12) items, 25%, are concerned directly with research. These items are identified by an asterisk immediately preceeding the item number. The data in Table IV indicates that the institute was influential in producing a change in attitude or beliefs, as it relates to those items listed in Table IV.

Only seven (7) of the sixty seven (67) items indicated absolutely no change. This number represents only 10.45% of the total items. Hence, some degree of change was identified in 89.55% of the items on the institute evaluation form I. These data reveal that most of the participants did register some degree of change on a very high percentage of the items.

Depending on the desired correct response, and the desired direction of change, 89.55% could reflect an extremely significant change. It is improbable to assume that such change could be attributed to chance. Implied in the above data is the hypothesis that change, as it relates to the sixty seven (67) items could be attributed to the outcomes of the institute. If this hypothesis is true the institute has, in this respect alone, served a very valuable professional function. An important goal of institute X was the change of attitude and a greater awareness of the problems, programs and resources of inner-city programs ov vocational education.

Finally, a review of the twelve (12) items in Table IV will reveal items which are extremely pertinent to the development of quality programs of vocational education in our contemporary society. Hence, a positive change of attitude assumes even greater significance in the long range future of vocational education.

A more detailed study of the data emanating from institute evaluation form I is deemed important. However, such a detailed analysis is considered inappropriate for the purposes of this report. The time constraints and the nature of this report do not contribute to a detailed study within this document. A wealth of basic information is contained in the pre-test and post-test data. Such information especially if considered on the basis of all of the institutes could provide the raw data for an extensive, pertinent, and valuable research project.

Evaluation Form II

These data were collected by means of Institute Evaluation Form #II. To provide greater clarity this report will be presented in two sections. Section one is devoted to a statistical and narrative summary of the objective data obtained by the participants response to items 1-30 of the Institute Evaluation Form. Section two is devoted to a descriptive summary of the subjective data obtained by the participants response to items 31-38 of the Institute Evaluation Form.

A word of explanation is in order, at this point, regarding the "weighting system" utilized in this evaluation. Some of the questionnaire items were structured in such a way that the most desired response would be "strongly agree." For example, item 1 "The objectives of this institute were clear to me" should elicit the response "strongly agree." While other items were structured to produce a "strongly disagree" as the most desired response. For example, item 2 "The objectives of this institute were not realistic" should produce a desired response of "strongly disagree." For all items there are five possible choices. A value of five (5) was awarded to the most desired response, a value of four (4) was awarded to the next most desirable response, then a three (3), two (2), and one (1) in decending order. A value of zero (0) was assigned in those cases where the item received no response. Multiplying the number of responses in each category by the value of that category enables one to obtain a total value for each category, hence, a total value for each item and thus an average value for each item.

Statistical Summary

Table V presents a statistical summary of items 1-30. Column one indicates the response of the participants who selected the option "strongly agree" for each item. Columns 2, 3, 4, and 5 summarize the responses of the "agree," "undecided," "disagree," and "strongly disagree" respectively. These categories are identical to those categories on the original evaluation form. Column 6 identifies the "no response" category. Column 7 indicates the average value for each item. The average value was obtained by determining the total value and dividing by the number of participants. Column 8 shows the rank order of the various items. The normal statistical technique was employed to determine the rank order. Each item contains an asterisk (*) prior to column one (1) or immediately following column five (5). The asterisk was utilized to indicate which end of the continuum represents the most desired response.

An analysis of the data presented in table V reveals the following significant factors. Six (6) items received an average rating of 4.50 or higher, based on a maximum average of 5.00. The items are listed below in the appropriate rank order:

- Item 15 We worked together well as a group
- Item 6 I did not learn anything new
- Item 8 I could have experienced as much by reading a book
- Item 21 I did not have an opportunity to express my ideas
- Item 22 I really felt a part of this group
- Item 29 Institutes such as this should be offered again in future years

These data tend to indicate a strong feeling that the institute was worthwhile, and the individual felt they were part of the group and felt a close relationship to other individuals involved in the institute experience. These factors can probably be explained by the appropriateness of the topics presented and by the size of the group. The small number of participants provided the conditions for more personalized attention.

Eleven (11) items obtained an average value between 4.0 and 4.5. Again, this is based on a maximum average of 5.0. The eleven (11) items are highlighted below:

- Item 14 New professional associations were made which will help
- Item 11 The speakers really knew their subject
- Item 7 The material presented was valuable to me
- Item 13 I was stimulated to think about the topics presented
- Item 30 Institutes such as this will contribute greatly to stimulating interest in improving vocational education in the metropolitan areas.
- Item 23 My time was well spent
- Item 10 The information presented was too elementary
- Item 20 There was very little time for informal dialogue
- Item 16 We did not relate theory to practice
- Item 18 The schedule was too inflexible
- Item 26 Too much time was devoted to trivial matters

These data appear to reveal that the material presented was appropriate, valuable, practical, and stimulating. The evidence further indicates adequate opportunity to pursue the topics and adequate opportunity for discussion of the material presented. It should be noted that items 10, 20, 16, 18, and 26 were negative statements with which the participants disagreed to a high degree, thus resulting in a high rating (see table V). The eleven (11) items cited above reveal that sixteen (16) items (56.6%) were considered valuable by the group to the extent they received a 4.0 or higher rating on a 0-5 point scale.

Only three (3) items (10%) received a rating less than 3.50. These items are identified below:

- Item 17 The sessions followed a logical pattern
- Item 24 The institute met my expectations
- Item 28 The content was applicable to the important problems in this area

These items indicate that the expectations of the participants were somewhat inconsistent with the expectations of the institute director. Also, there appears to be some questions of the extent to which the institute content made an impact on the important problems of vocational education in the metropolitan areas. However, the fact that the lowest three (3) items on the overall evaluation received evaluations above 3.00 is viewed as an extremely positive indicator that the institute did meet the needs of the participants to a relatively high degree.

TABLE V
Composite Statistical Summary of Evaluation
(Post-Test II)

Item No.	Strongly Agree		Agree		Un-decided		Dis-Agree		Strongly Disagree		No Response		Ave. Value	Rank Order
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%		
1	4	22.2	10	55.5	0	0	4	22.2	0	0	0	0	3.77	22.5
2	2	11.1	1	5.5	10	55.5	4	22.2	4	22.2	0	0	3.72	24.5
3	2	11.1	11	61.1	3	16.6	2	11.1	0	0	0	0	3.72	24.5
4	3	16.6	11	61.1	4	22.2	0	0	0	0	0	0	3.94	19
5	2	11.1	2	11.1	1	5.5	9	50.0	4	22.2	0	0	3.61	27
6	0	0	0	0	0	0	7	38.8	11	61.1	0	0	4.61	2
7	6	33.3	11	61.1	1	5.5	0	0	0	0	0	0	4.27	10
8	0	0	0	0	0	0	9	50.0	9	50.0	0	0	4.50	4.5
9	2	11.1	11	61.1	2	11.1	3	16.6	0	0	0	0	3.66	26
10	0	0	0	0	0	0	15	83.3	3	16.6	0	0	4.16	13.5
11	7	38.8	11	61.1	0	0	0	0	0	0	0	0	4.38	8
12	4	22.2	11	61.1	0	0	2	11.1	0	0	1	5.5	3.77	22.5
13	5	27.7	13	72.1	0	0	0	0	0	0	0	0	4.27	10
14	9	50.0	8	44.4	1	5.5	0	0	0	0	0	0	4.44	7
15	12	66.6	6	33.3	0	0	0	0	0	0	0	0	4.66	1
16	0	0	1	5.5	1	5.5	12	66.6	4	22.2	0	0	4.05	16
17	1	5.5	10	55.5	3	16.6	4	22.2	0	0	0	0	3.44	28.5
18	0	0	0	0	0	0	12	66.6	5	27.7	1	5.5	4.05	16

TABLE V (Cont'd)

Item No.	Strongly Agree		Agree		Un-decided		Dis-Agree		Strongly Disagree		No Response		Ave. Value	Rank Order
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%		
19	6	33.3	8	44.4	1	1.5	3	16.6	0	0	0	0	3.94	19
20	0	0	2	11.1	0	0	9	50.0	7	38.8	0	0	4.16	13.5
21	0	0	0	0	0	0	9	50.0	9	50.0	0	0	4.50	4.5
22	10	55.5	7	38.8	1	5.5	0	0	0	0	0	0	4.50	4.5
23	11	61.0	4	22.2	0	0	2	11.1	1	5.5	0	0	4.22	12
24	4	22.2	8	44.4	0	0	4	22.2	2	11.1	0	0	3.44	28.5
25	3	16.6	12	66.6	2	11.1	0	0	1	5.5	0	0	3.88	21
26	1	5.5	0	0	0	0	13	72.2	4	22.2	0	0	4.05	16
27	0	0	0	0	2	11.1	10	55.5	5	27.7	1	5.5	3.94	19
28	4	22.2	8	44.4	0	0	3	16.6	1	5.5	2	11.1	3.27	30
29	10	55.5	7	38.8	1	5.5	0	0	0	0	0	0	4.50	4.5
30	9	33.3	6	33.3	2	11.1	1	5.5	0	0	0	0	4.27	10

Descriptive Summary

This section of the evaluative report is devoted to a summary and an analysis of the responses obtained from the participants for items 31-38 on Institute Evaluation Form #II. The summary statements on the following pages were taken virtually verbatim from the evaluation forms. In some cases the statements were condensed in the interest of space. However, even in those cases the words and statements are those of the participants, not the writer of this report.

Items 31-38 represent a vital phase of the overall evaluation, because they provided opportunity for free expression of ideas, reactions, concerns, and values based on the perception of each participant as an individual. These perceptions are influenced by the background, the position, the experiences, and the needs of each individual and program from which they come.

It is considered important, at this point, to acknowledge the value and the role of all reactions. The positive statements and negative statements represent a significant part of the total data collected. Both types of information are presented here and included in the analysis. True evaluation mandates both positive and negative points within the framework of constructive criticism.

The following evaluation will be presented on the basis of a summary and then the analysis of each item. Hence, the review of each item will be complete before going on to the next item. This should provide greater clarity and continuity.

Item 31. As a result of your participation in this institute, what plans have you formulated which you may present through appropriate channels for consideration and action in your community either now or the immediate future? Outline briefly the key points.

1. Plan to present information to decision makers
2. Would have been more valuable if those in a decision making capacity had attended
3. Information Systems Improvement
4. Program planning
5. Proposal Development
6. Teacher Training Improvement
7. Brief superintendent on major points
8. Recommend changes in direction
9. Recommend study of my report by proper department
10. Recommend a committee to review recommendations that apply in local situations
11. Utilization of ERIC
12. Change the attitudes of principals and teachers toward importance of vocational education
13. Take a serious look at the effectiveness of the so called comprehensive high school
14. Contact superintendent relative to use of simulation techniques in vocational education
15. Now have a better appreciation of vocational education and can enter into dialogue with the State Director Much Better
16. System of collecting information
17. Discuss institute content with vocational personnel
18. Continue our efforts towards handling the problems of providing meaningful training for the disadvantaged and handicapped youth with a variation of the work experience and work adjustment programs presented here
19. Discussion with vocational education department about research services and needs
20. Link with the vocational education people in the field for dissemination of research
21. Information center in Washington, D. C.

22. Information center at the State Department
23. More information at the local level
24. Particularly interested in the research aspects of the institute and intend to incorporate this in my own research and teaching
25. I will insist that plans be initiated to provide vocational orientation and exploration for all students in Grades K-8
26. Not now in a position to do anything about my newly acquired knowledge, but, hopefully with a job change I might be able to
27. R.C.U. and ERIC information was helpful
28. Per State plan submitted to State Department as an example of what can be done
29. Simulation technique in vocational-technical education
30. More effectively utilize all the services of ERIC
31. More opportunities and ways to receive necessary information and make available to school personnel
32. Some definite ideas on individualized instruction
33. None
34. Development of a business education information system
35. Leadership workshop with city directors of business education

An analysis of the summary of responses to Item 31 reveals the following information:

1. Only one individual indicated no plans relative to implementation of the institute content.
2. All (100%) of the reactions and comments were of a positive nature.
3. Thirty one (31) percent of the responses indicated plans to share the information obtained at the institute with their decision making colleagues back home.
4. Thirty-one (31) percent of the responses were concerned with plans to develop stronger information systems in their school, city, or state.
5. A large number of the respondents indicate plans to utilize and apply this information in the process of program planning. This appears to be a very significant factor because most institutes hope to create a positive effect on local and state programs.
6. Other major categories identified include the application of knowledge gained in the institute in proposal development, changing attitude, developing appreciation and the utilization of simulation technique.

All of the above factors reveal positive and desirable outcomes. The data tends to indicate the attainment of new knowledge and skills which can be implemented and are viewed by the participants as being desirable for implementation. These facts imply realistic and practical institute content, which will serve as a change agent for local and state programs of vocational education.

Item 32. As a result of your contacts with the participants and consultants at this institute, have you decided to seek some continuing means of exchanging information with any of them? What types of information can the consultants or participants contribute that would be helpful to your work?

1. I have talked to some participants about innovative programs
2. I have learned of new programs
3. I have received and been promised other materials
4. Existing data on Information Systems
5. Information on programs K-12
6. Work adjustment, disadvantaged programs
7. Efforts by new personnel
8. New program strategies for potential and existing vocational teachers
9. Plan to write for more information from consultants
10. More information relative to the basic functions of ERIC
11. Program planning
12. Occupational Training System
13. The Minneapolis Work Opportunity Center
14. Research and consultation to help us with a State Plan
15. Some information and materials are to be mailed
16. See that studies are mailed as planned
17. Consultants could be helpful if they would follow presentations with material formats, literature, slides and other public relation or statistical items
18. Additional information on R.C.U.
19. The types of vocational programs offered in other states
20. Would like to know more about the Penn State Plan for determining program need
21. I will write for more materials on vocational orientation and exploration
22. I also want to work out a good evaluation program to check the effects of vocational education on students self concept, maturity level and cognitive competence
23. Yes - stimulated to change from Industrial Arts to Vocational Education

24. A follow up with many of the participants and consultants anticipating
25. Materials and program booklets have been requested and are expected soon
26. Yes, send Dr. Joseph ideas and materials of value to him
27. Mr. Gorman furnished me with a guide for an excellent in-service program
28. No, but probably will
29. Dissemination of materials
30. Much information could be provided by participants and consultants
31. No
32. Yes, curriculum, programs, and instructional materials.

An analysis of the response to Item 32 indicates that ninety-three (93) percent of the responses reveal plans to see a continuing exchange of information with consultants and other participants. A detailed analysis of the specific nature of the planned follow-up is inappropriate in this situation. The significant factor is that virtually all of the respondents indicate plans to continue to exchange information.

Item 33. In your opinion, what were the major strengths of this institute?

1. Expertise of the participants and speakers
2. The rapport of the group
3. The information presented by the speakers
4. The leadership given by the director
5. Participant contacts
6. Exchange of information and materials
7. Exceptional leadership of institute director
8. Keeping group on the elements of the conference
9. The program consultants were authorities in the areas represented
10. The presentations were easily understood
11. The topics were a cross section of vocational education area
12. The information that was presented by the speakers
13. The sharing of ideas with one another
14. The willingness of participants to pitch in and make a go of a situation
15. The size of the group - 20 was very good group
16. The people invited as speakers
17. Speakers presented practical and new approaches to solution of major problems
18. The participants

19. Communication of ideas
20. Professional associations with the conference participants
21. The dedication of the participants
22. The willingness of the institute staff to make this conference valuable
23. Learning about the forward looking programs that are already in existence
24. A strong and capable director
25. The content of the institute was good
26. The interaction among the participants
27. Opportunity to talk others with like problems
28. Opportunity to obtain concepts that get at problems
29. Exceptionally well organized and administered
30. Hospitality was excellent
31. The field trip
32. Exchange of ideas with the participants
33. The enthusiasm of the speakers
34. The information and materials were valuable
35. Good information on secondary vocational education
36. Information on statewide information systems
37. Information on R.C.U. and ERIC

The major strengths of the institute seem to cluster primarily around four (4) specific aspects of the institute.

1. Consultants - 20% of responses - 40% of respondents
2. Participants - 20% of responses - 40% of respondents
3. Program - 40% of responses - 80% of respondents
4. Administration - 20% of responses - 40% of respondents

The above data indicates a well balanced institute which met the needs of the participants. Item 33, concerned with institute strengths elicited the greatest number of responses of all the open-ended, free response items.

Item 34. In your opinion, what were the major weaknesses of this institute?

1. The title and the description of the conference were ambiguous
2. Lack of time for small group development of information systems
3. None-in terms of objectives
4. Some consideration of entertainment of the group in the evening
5. I would like to have had more handouts to carry home
6. Too short
7. Speakers and leader allowed us to divert from the topic and the objectives
8. Again the usual criticism too much material for too little time

9. No major weaknesses
10. The location was a minor factor
11. Cancellation of participants that was beyond the control of the institute director
12. Having only two small group discussions
13. Too much time devoted in some areas
14. More attention to programs for the disadvantaged in urban areas
15. I had hopes of seeing Kent State, but understood the situation
16. Location - a hotel in a city would have been better
17. The institute did not address itself to the inner-city innovations. I had anticipated it to
18. Lack of preparatory information
19. Certain social issues were not covered
20. The lack of meeting the specific objectives i.e. urban problems
21. My background as preparation for the institute
22. Would like to see more awareness of the need for post-secondary programs
23. Very few discussions, materials or presentation on problems in urban education.
24. Insufficient research for urban areas

The primary weakness of this institute as identified by the participants was program content. Four individuals, representing twenty two (22) percent indicated that the program content was not sufficiently concentrated on urban problems. One individual indicated a desire for greater attention to post-secondary programs. The second major weakness was concerned with the time element. Four individuals expressed the feeling that insufficient time was allotted for the institute. The remainder of the weaknesses were distributed over such concerns as more materials, locations, and institute title.

The weaknesses identified appear to be legitimate, accurate and healthy. The concern for program content is appropriate from a participant point of view, and inappropriate from an administrative point of view. It was the opinion of the institute director that all topics presented had application to urban problems. It is true that all of the topics also could apply to non-urban problems. The remainder of the weaknesses were somewhat minor and sporadic.

Item 35. If you were to conduct an institute similar to this one, what would you do differently from what was done in this institute?

1. Schedule more involvement-activity similar to the simulation technique
2. Attempt to assess problems of participants and have small group input
3. Nothing-except for consideration of evening activities
4. I would like to have had some students in vocational education
5. I would like to have had some graduates from the program
6. I would like more school visits
7. Pick a better hotel
8. Have presentation with no questions until speaker is finished - then discussion
9. I would attempt to inform the participants longer before the beginning
10. Doubt if any institute director will ever be faced with a set of circumstances like this one
11. More printed materials to summarize the highlights of the presentations
12. Some visuals-overlays-materials
13. More time allotted to the speakers
14. More time for group discussions
15. More participants
16. A two week institute instead of one
17. Earlier notice of acceptance
18. More time for brainstorming and problem solving
19. Four days and three night sessions would be sufficient
20. The actual use of information regarding metropolitan areas
21. Address race issue, how does addition of black students affect quality
22. When introducing the simulation technique have it tailored for application in the urban setting
23. Have all the research and innovative programs related to urban problems presented either by those responsible for programs or those who could interpret programs to us

Item 35 is concerned with the reaction of the participants to suggestions for improvement of similar institutes. The summary reveals a wide variety of suggestions. There are no issues that emerge as dominant factors. Several suggestions, such as more time for speakers, student speakers, graduates of vocational programs as speakers etc., represent participant desires which would place serious limitations on the scope and variety of presentations relative to innovative programs. Several suggestions concern time schedule, one suggestion is for a shorter institute, the other suggestion is for a longer institute. The data presented appears to reflect valid needs which participants have identified. The suggestions tend to be valid and realistic and should be considered in future institute planning.

Item 36. Additional comments about institute

1. None
2. Additional speakers outside of education (business, industry, unions, minority groups).
3. More involvement of U.S.O.E. personnel
4. Participants were interesting, knowledgeable, informed, and thinking people
5. Group inneraction alone was worthwhile experience
6. The program was very well organized - no loss of time
7. Dr. Nichols is an effective institute coordinator
8. Institute director is knowledgeable and respected by all participants
9. Prefer earlier in the spring
10. Thank God we did not have 70. 20-30 just right
11. Good institute
12. Felt I gained from the conference material as well as personal contacts
13. It should be held on a campus or in an urban area
14. The U. S. Office of Education should be encouraged to hold more of these conferences
15. I enjoyed the institute and feel I am taking away more than I contributed
16. I met all of the participants and consultants, these new acquaintances will be long lasting and valuable
17. Institute was very interesting
18. Obviously a lot of time was spent in preparation
19. Appreciate very fine hospitality and considerations of hosts
20. Enjoyed the fellowship and sincerely felt I benefited from the experience
21. I feel I learned a tremendous amount
22. Institute was of limited value to me as a community college educator
23. If research or innovations presently available are inadequate or ineffective the institute should have shown this immediately

This section of the evaluation is concerned with additional comments participants desired to present relative to the institute. An analysis reveals that seventy (70) percent of the comments indicate a positive reaction and attitude towards the institute. Twenty one (21) percent are interpreted as negative comments, while nine (9) percent were neutral. The negative comments do not appear to represent major factors in terms of institute success. The negative comments are based on differences of opinion regarding philosophy, method, content, and operation of an institute.

The comments did not lend to grouping or categorizing, hence, no attempt was made here to identify major areas of reaction. The data tends to indicate a general satisfaction on the part of the participants.

Item 37. If you had it to do over again would you apply for this institute which you have just completed?

YES	15	83.3%
NO	2	11.1%
UNCERTAIN	1	5.6%

The above data reflects a general participant satisfaction with the institute. No explanation is available for the reason two individuals responded negatively and one as uncertain. It appears significant that fifteen (15) out of eighteen (18) indicated they would apply if they had it to do over again.

Item 38. If an institute such as this is held again would you recommend to your peers that they attend?

YES	15	83.3%
NO	2	11.1%
UNCERTAIN	1	5.6%

These data indicate a level of satisfaction virtually identical in nature to Item 37. The proof of any institute is the extent to which those in attendance would recommend that institute to others. According to the information presented here, the participants were generally willing to recommend such an institute to their colleagues. Again, no data are available to explain the reason for the two "no" responses and the one "uncertain" response.

Post Institute Evaluation

The evaluation efforts previously described in this section of this report represent an adequate institute evaluation as of the completion of the institute. However, such an evaluation is incomplete in terms of the long range view of the institute and its potential for "ripple" effect. The final test of any educational endeavor rest with the extent to which the results of educational program are implemented, shared, and nurtured by the participants in their respective professional activities. Hence, a follow up study was conducted to determine the degree of "application" resulting from institute X.

The post institute evaluation was conducted six (6) months after the completion of the institute. A longer interval of time would have produced more concrete results, but was inconsistent with the time frame allotted and the scheduled duration of the total Metropolitan Area Institute Project. The post institute evaluation was conducted by means of a questionnaire. The questionnaire was selected as a data gathering instrument in the interest of total cost and to enable a complete coverage of participants. The questionnaire was designed to determine the extent to which participants have disseminated and/or implemented the findings, the ideas, and the outcomes of the institute. Also, an attempt was made to determine a post institute reaction to the overall program. The items relating to dissemination and implementation were structured to provide an opportunity for the participant to indicate the action now in the planning stage, the action now in process, and the action already completed. Additional opportunity was provided, by means of open-ended subjective items, to include remarks, perceptions, feelings, or attitudes held by individual participants.

Questionnaires were mailed to every participant. A follow up reminder was mailed ten days later. Fourteen (14) usable questionnaires were returned. The return represents 73.68% of the participants who attended the institute. The tabulation of the questionnaires was conducted to determine the nature and scope of the action taken by individual participants as a result of the influence of institute X. An analysis of the questionnaire data is summarized in Table VI. The table is followed by a narrative interpretation of the findings.

TABLE VI
Post Institute Evaluation Summary

Item Number		YES		NO		NO RESPONSE			
		Number	Percent	Number	Percent	Number	Percent		
1		0	0.0	10	71.43	4	28.57		
2		13	92.86	1	7.14	0	0.0		
3		10	71.43	3	21.43	1	7.14		
	IN PLANNING		ACTION IN		ACTION COMPLETED		NO RESPONSE		
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
4	4	28.57	1	7.14	9	64.29	0	0.0	
5	2	14.29	0	0.0	9	64.29	3	21.42	
6	2	14.29	0	0.0	9	64.29	3	21.42	
7	2	14.29	0	0.0	5	35.71	7	50.00	
8	1	7.14	0	0.0	5	35.71	8	57.15	
9	1	7.14	0	0.0	2	14.29	11	78.57	
10	1	7.14	3	21.43	0	0.0	10	71.43	
11	2	14.29	3	21.43	4	28.57	5	35.71	
12	1	7.14	7	50.00	2	14.29	4	28.57	
13	2	14.29	4	28.57	3	21.43	5	35.71	
14	2	14.29	7	50.00	1	7.14	4	28.57	
15	6	42.86	6	42.86	0	0.0	2	14.29	
16	2	14.29	2	14.29	6	42.86	4	28.57	
17 no response									
	YES		NO		NOT INTERESTED		NO RESPONSE		
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
18	13	92.86	0	0.0	1	7.14	0	0.0	
19	7	50.00	2	14.29	5	35.71	0	0.0	
20	12	85.71	2	14.29					

The respondents to the follow-up questionnaire indicated their second thoughts regarding the institute were quite positive. Eleven (11) respondents (78.57%) indicated their second thoughts were positive. One (1) person (7.14%) indicated their second thoughts were negative. Two (2) individuals (14.29%) did not respond to that particular part of item 20.

The last part of item 20 asks the respondents to briefly state what the nature of their post institute thoughts were. Listed below is a summary of the subjective comments of those who responded to the post institute evaluation questionnaire. These comments are stated in the exact words of the respondents. No attempt has been made to summarize the various comments.

1. Institute 10 increased my awareness to the needs of people in a metropolitan area.

2. Research data pertaining to needs of people and present and future job opportunities must be compiled and kept current.

3. As the RCU for the state we need to expand the awareness of our services and encourage use of research.

4. I would like to see a statewide institute held that would be organized by a college or some other organization that is not part of the state vocational department. This institute would focus on the problems of cities to develop realistic vocational education that meet the needs of the thousands of youngsters that are not being adequately served in our present comprehensive high schools.

5. I am not in a position to effect change, but, I can influence the process by helping decision makers to be better informed and supplying data needed to make more rational decisions.

6. The exchange of ideas with other educators is always a worthwhile thing. The field trip to Cleveland helped to show how other people are achieving in certain areas. It broadened my way of thinking in several matters. The institutes seem quite worthwhile. I would like very much to be involved in another one.

7. I have changed from Industrial Arts to the field of vocational education.

8. The opportunity to meet people in like stations on an informal basis after the regular day time meetings was most valuable.

9. It improved my visibility and gave me a different view of vocational-technical education.

10. I felt that one of the most valuable, from a state wide view of the conference, was the examination of future labor demands.

11. It is unfortunate that our state official could not have attended to obtain the informed discussion approach used.

12. Knowing that others are moving ahead gives momentum to movement on our part.

13. I have implemented changes relative to positive attitudes toward vocational education by all of the division of instruction.

14. Vocational Education is no longer a separate isolated division with little contact or relationship with other divisions.

15. The institute didnot address its self to urban problems. Sorry about that.

An analysis of the post institute evaluation questionnaire indicates a highly successful conference. The data reveals that 71.43% of the respondents have made changes or taken action as a result of attending institute 10. Additionally, 92.86% indicated they had developed a greater awareness of urban problems, and 71.43% indicated they had changed their attitude toward vocational education in metropolitan areas.

A high percentage (64.29%) of the respondents had completed the action indicated in items 4,5, and 6. Many of the participants did not respond to items 7,8,9, and 10. Items 11 through 16 indicate a high percentage of the participants are attempting to implement the results of the institute. The data reveals that the local plans are in various stages of progress in terms of planning and completion. It is considered significant that most of the participants are taking action and attempting to make change.

The data for item 18 show that 92.86% of the participants would be interested in attending similar institutes. This is viewed as a vote of confidence for the content of institute 10. Item 19 reveals an interesting fact. Half of the participants felt they could not effect change in their situation. The largest percentage (35.71) felt they were in no position to influence change.

The subjective comments at the end of the questionnaire tend to confirm the statistical data. The individual comments attest to an expanded knowledge, greater awareness, or increased incites relative to the problems and solutions in metropolitan areas.

RESULTS, CONCLUSIONS, AND RECOMMENDATIONS

Objectives of Institute

This area of the report is concerned with a review of the institute objectives. These objectives set the stage and serve as a "bench mark" which constitute a guide to determine the extent to which the objectives were achieved. However, a reminder is in order at this point. Earlier in this report a reference is made to an analysis conducted by the institute consultants which revealed that the original objectives were so broad and comprehensive in scope that they could not be accomplished in one week. The decision was made to concentrate on selected attainable objectives. The remainder of this section is presented in light of this decision. For purposes of clarity a more detailed description of the objectives will be presented here.

(1) To examine and categorize the information services educators need in order to use research and technical information in planning, implementing, and evaluating vocational education programs. This goal is devoted to a study of the sources of and procedures for obtaining data which can be utilized in program planning, the conduct of operating programs, and the assessment of program success. Such a study includes an analysis of the data procurement needs of educators.

(2) To assess the major active or planned information systems or services relevant to vocational education. This objective is concerned with a review information systems currently operative and/or those information systems presently planned for implementation soon. Such a review is devoted to determining the extent to which the identified systems and services, including ERIC and R.C.U., are applicable to utilization in vocational education programs.

(3) To identify gaps in present systems for acquiring, processing, announcing, disseminating, analyzing and interpreting educational report literature, particularly for documents generated by state and local educational agencies. This goal is perceived as comparing desired services with existing services, and determining the specific information services needed to provide appropriate services for conducting and disseminating research results. Special emphasis is devoted to providing effective information services for state and local documents.

(4) To develop alternative models for organizing needed services with potential for high cost benefit returns, specifying information service roles, functions, and activities at local, intermediate, state and multi-state levels. This objective is concerned with generating an information system model that would be applicable at all levels of utilization.

(5) To test the models using simulations or other appropriate data. This goal is devoted to assessing the effectiveness of the model by means of a variety of evaluation techniques.

(6) An additional objective was included with the original list. This objective which is listed and described below was added on the basis of the applicability to inner-city problems and programs. To study the viable, relevant innovations, promising research, and proven demonstration programs applicable to educational programs in vocational education. This objective includes such areas as video tape, micro teaching, area school concepts and developments, programs for disadvantaged youth, teacher education, and simulation techniques.

Participant Contributions

The participants contributed to the achievement of the objectives stated above by contributing to a discussion of information services problems. These discussion sessions, using the conference approach, were led by the resource consultants who possess expertise in the area of research dissemination. Small group sessions devoted to identification of problems and needs yielded the following pertinent items.

1. Widespread dissemination is not readily available in a form which is usable to busy individuals at state and local levels.
2. Present systems of dissemination require extensive time to produce the desired information.
3. A more expedient system of dissemination is needed at all educational levels.
4. Present research librarians are unable to provide the type of personal retrieval and dissemination services desired and needed by vocational educators.
5. An interface agent who possess research skills, knowledge, and insights, and knowledge of vocational education is needed to provide realistic service.
6. More specific dissemination documents are needed to provide readily accessible data.

7. A computer terminal is needed to provide an immediate link with major dissemination centers.

Additionally, the resource personnel provided background information which facilitated a review and analysis of existing information services including ERIC and RCU. Selected consultants did address themselves to a discussion and review of other information systems, and an analysis of needed services based on experience and personal feedback.

Resource personnel were also utilized to share data relative to innovative programs and experimental projects which were considered applicable to metropolitan areas. An opportunity was provided for interaction between participants and consultants. This enabled each participant to pursue each presentation topic to the depth he considered appropriate. It also enabled the participant to obtain a clearer understanding of each innovative idea or demonstration project. An examination of the institute agenda will reveal that each topic on the agenda was consistent with the institute objectives stated above.

The role and contribution on the planning consultants has been presented in an earlier section of this report. The planning contributed significantly in terms of ideas, information, time, effort, and physical assistance. A successful institute would have been impossible without the professional support and the quantity and quality of contribution of the planning consultants.

The final outcome sought was a greater awareness of the problems of metropolitan areas, and a background knowledge of possible solutions to the problems identified. The overall institute design recognized the key leadership role of the participants. The participants were expected to serve as catalyst in the broader dissemination of the institute content.

Attainment of Objectives

In the final analysis, the true test of the attainment of objectives rest with the participants evaluation of the institute. These data are found in the evaluation section of this report.

In the interest of integration and clarity, an assessment of the attainment of the objectives will be made by comparing the accomplishment with each stated objective.

(1) To examine and catagorize the information services educators need in order to use research and technical

information in planning, implementing, and evaluating vocational programs. A thorough coverage of ERIC and RCU services were services were presented, discussed, evaluated, and analyzed. As indicated earlier the resource personnel conducted a conference session after the formal presentation. The conference session was devoted to a review of the information service needs of vocational educators and problems encountered in utilizing the ERIC and RCU.

(2) To assess the major active or planned information systems or services relevant to vocational education. This objective was also achieved in the interaction sessions with the information services resource personnel. The participants verbal and written reaction to these sessions indicate a valuable, productive activity which did achieve to some degree the stated objective.

(3) To identify gaps in present systems for acquiring, processing, announcing, disseminating, analyzing and interpreting state and local educational agencies. Much of the interaction discussion centered around this objective. Many weaknesses in existing systems were identified and explored. One of the outgrowths of this discussion was the identification of the need of an interface agent to retrieve research data.

(4) To develop alternative models for organizing needed services with potential for high cost/benefit returns, specifying information service roles, functions, and activities at local, intermediate, state and multi-state levels. Because of the time constraints this objective did not receive the time or attention it truly deserves. Alternative models could not and were not developed.

(5) To test the models using simulations or other appropriate data. Obviously if objective number four, above, could not be realized, then objective number five, could not be implemented.

(6) To study the viable, relevant innovations, promising research, and proven demonstration programs. A large part of the institute was devoted to achieving this objective. Numerous agenda topics were concerned with the dissemination of innovating programs and concepts. A review of the institute evaluation data will reveal evidence that the participants felt very positively about this phase of the institute.

Conclusions and Recommendations

The following conclusions and recommendations emerged from the institute:

1. The evaluation data indicate a worthwhile institute that appears to meet the need of the participants. The evaluation reveals that the participants were especially pleased with the orientation to the innovative, ideas, concepts, and programs.

2. There are operational gaps in existing information systems and services. The participants were especially vocal about the fact that present dissemination documents are difficult to utilize, are time consuming to conduct simple basic research, and are not widely available to the "troops."

3. One recommendation concerns the establishment of an interface research agent that would operate between the dissemination source and the research consumer. The participants expressed the need for someone other than a research librarian.

4. The participants recommended the implementation of computer terminals which would provide the vehicle for greater utilization of research resource materials. The group proposed a plan which would provide nearly a direct connection between consumer and dissemination source. This would enable the research consumer to identify a problem or research topic and obtain relevant research materials in a very short period of time.

5. The participants were unanimous in their recommendation that additional institutes of this kind should be provided for more vocational education personnel. They expressed the feeling that the opportunity to share with knowledgeable, competent resource personnel. The opportunity to concentrate efforts on the problems of the metropolitan areas was identified as an institute strength.

6. Experience with this institute indicates the need for a reappraisal of the time allotted to the various institutes. As indicated earlier the time frame provided for the institute was somewhat inconsistent with the stated objectives.

A P P E N D I X A

BROCHURE AND APPLICATION FORM

Metropolitan Area Application
of
Vocational Education Innovations
Resulting From
Research and Development
Programs

May 18-22, 1970

Conducted By
Kent State University
College of Education
Department of
Vocational Education

Sponsored & Coordinated By
The Division of
Vocational Education
College of Education
Temple University
Philadelphia, Pennsylvania 19122
Under U.S.O.E. Grant 9-0535

PURPOSE

The Department of Vocational Education, in its present form, was established within the College of Education, Kent State University, July 1, 1964.

The responsibility has been assigned to the department for pre-service and in-service teacher education, area supervision, and related special services.

The 26 staff members of the Department of Vocational Education includes teacher education in all vocational services, area supervisors, adult consultant, industrial leadership consultant and fire service consultant.

SCOPE

The federally reimbursed programs which are included in the Department of Vocational Education are:

Vocational Business Education
Vocational Distributive Education
Vocational Home Economics
Vocational Trade & Industrial Education
Vocational Technical Education
Vocational Health Occupations
Manpower Development & Training
Adult Education

1526-4-70

BUSINESS REPLY MAIL

No Postage Stamp Necessary if mailed in the United States

Postage Will Be Paid By—

Dr. Charles W. Nichols, Director
Metropolitan Area Institute 10
Room 413 Education Building
Kent State University
Kent, Ohio 44240

72

FIRST CLASS

Permit No. 12

Kent, Ohio

PURPOSE:

The institute is designed to provide background information relative to information relative to information services and dissemination techniques in vocational education. Also included will be a review of innovative programs in vocational education which have application for metropolitan areas.

PARTICIPANTS:

Seventy (70) participants will be invited to attend this institute. Representatives from major metropolitan cities, state departments of education, research coordinating units, teacher preparation institutions, and local program administration in vocational-technical education will be invited.

PROGRAM:

The program will include resource consultants from state and national information service agencies. Additionally, consultants currently involved in operating innovative programs will be invited to share information on program operation, results and developments. Involvement by the participants will also be a vital part of the institute.

TRAVEL AND SUBSISTENCE:

Each participant who attends all regularly scheduled sessions of the institute will receive a subsistence allowance of \$75.00 for the one week period. Reimbursement for travel will be based on tax exempt coach air fare, or mileage

at eight (.08) cents per mile by auto, whichever is less to and from the institute.

HOUSING:

Housing reservations will be made by the institute director. Detailed information will be provided to participants on notification of acceptance.

APPLICATION FOR PARTICIPATION:

Participants will be selected by the project director. An attempt will be made to obtain wide geographical and occupational representation. Attention will be devoted to the potential for the application of the knowledge and skills acquired.

The policy of Kent State University and the procedure under Title VI of the Civil Rights Act of 1964 provides that "No person shall, on the ground of race, color, or national origin, be excluded from participation in or be denied the benefits of, or be subjected to discrimination under this program."

APPLICATION ASSISTANCE:

Participants who want additional information and/or application forms may contact:

Dr. Charles W. Nichols, Director
Metropolitan Area Institute 10
Room 413 Education Building
Kent State University
Kent, Ohio 44240
Phone: 216-672-2929

APPLICATION FOR PARTICIPATION

Institute for Metropolitan Area Applications of Vocational Education Innovations Resulting from Research and Development Programs

Name _____

Home Phone _____

Address _____

Business Phone _____

Present Position _____

Participant's Signature _____

Institution _____

I agree that if accepted as a participant for this institute I will attend the entire period from May 18-22, 1970.

APPLICATION FOR PARTICIPATION IN
SHORT TERM INSTITUTES FOR IN-SERVICE TRAINING OF PROFESSIONAL
PERSONS RESPONSIBLE FOR VOCATIONAL-TECHNICAL EDUCATION IN
EASTERN METROPOLITAN AREAS

NAME Miss.
Mrs.
Mr.
Dr. _____
(Last) (First) (Middle)

Address _____
Street City State Zip Code

Telephone _____

Representing _____
Indicate state, city, professional organization or public body

PROFESSIONAL EXPERIENCE

Current position _____
(Title) (years held)

(Employer's name) (Address)

Major responsibilities _____

EDUCATIONAL BACKGROUND

High School graduate: yes _____ no _____

College graduate: yes _____ no _____ degree _____

Master degree: yes _____ no _____

Doctorate: yes _____ no _____ degree _____

I consider myself especially knowledgeable in _____

Please indicate in order of preference three institutes from the ten listed below that you would be able to attend. Insert the institute number in the spaces provided.

Preference 1 _____ Preference 2 _____ Preference 3 _____
(Institute #) (Institute #) (Institute #)

Institute I - Administrative Coordination of Vocational Education in Metropolitan Areas

Institute II - Annual and Long-Range Program Planning in Metropolitan Areas in Accordance with the Vocational Education Act Amendments of 1968

Institute III - Orientation to New Vocational Education Concepts and Programs in Metropolitan Areas

Institute IV - Coordination of Supportive Programs for Vocational Education Students in Metropolitan Areas

Institute V - Improving the Preparation of Professional Personnel for Vocational Education in Metropolitan Areas

Institute VI - Updating the Process and Content of Teacher Education Courses to Reach Disadvantaged Adults in Metropolitan Areas

Institute VII - Updating the Process and Content of Teacher Education Curriculums to Reach Disadvantaged Youth in Metropolitan Areas

Institute VIII - Improving Occupational Orientation Programs for Junior High School Students in Metropolitan Areas

Institute IX - Development of Vocational Guidance and Placement Personnel for Metropolitan Areas

Institute X - Metropolitan Area Application of Vocational Education Innovations Resulting from Research and Development Programs

I desire to participate in the institute selected because: (state succinctly your reasons)

Reason for first choice :

Reason for second choice :

Reason for third choice :

What knowledge or skill do you feel you can contribute as a result of your participation in: (state succinctly your possible contribution)

First choice :

Second choice :

Third choice :

What knowledge or skill would you like to obtain as a result of your participation in: (state succinctly what you desire to obtain)

First choice :

Second choice :

Third choice :

List any important problems which you feel should be presented. Identify the appropriate institute. Do this by placing the institute number before each problem.

IF ACCEPTED AS A PARTICIPANT:

- a. Indicate your most likely mode of travel: ____air, ____auto, ____other.
- b. Would you be bringing members of your family with you? ____yes, ____no.
If yes, please give their name (s) and relationship to you.
- c. Indicate the type of housing desired:
I will share a double
I prefer a single; I shall pay any extra charges.
- d. I agree that if accepted to participate in this institute I will be in attendance for the entire scheduled period.

Applications must be postmarked no later than_____.

Please complete and return to:

Signature

A P P E N D I X B

LIST OF PARTICIPANTS, CONSULTANTS, AND RESOURCE PERSONNEL

PARTICIPANTS

NAME, ADDRESS, PHONE	SCHOOL	POSITION OR TITLE
Bland, June D. Mrs. 1605 Buchanan St., N.W. Washington, D.C. 20011 723-4986	Dist. of Columbia Public Schools	Research Assistant
Brooks, Robert G. 145 Stonedale Rd. Warwick, R. I. 401-739-8135	Rhode Island Dept. of Education	Consultant
Cabot, Michael L. 330 Mt. Prospect Ave., Newark, N. J. 07104 201-485-3834	Newark Board of Education	Ass't Supt., Spec. Serv. and Spec. Ed.
Callian, Wm. D. Jr. 2597 Avery Memphis, Tenn. 38112 323-8311	Memphis City Schools	Coordinator of Instruction
Elser, Rober P. W. Va. Dept. of Ed. Charleston, W. V. 348-2707	W. Va. Dept. of Education	Dir., Special Education
Evans, Bill L. 1803 Claremoor Driveq Anchorage, KY 425-0843	Jefferson Co. Area Vocational School	Regional Supt.
Ferguson, Robert A. 1976 Azalea Circle Decatur, Ga. 30033 631-4860	Atlanta Public Schools	Director
Fish, Roger 5024 Townsend Way Bladensburg, MD 20710 301-864-6119	Dist. of Columbia Public Schools	Coordinator

FILMED FROM BEST AVAILABLE COPY

Jones, Oliver J.
501 W. 12th Street
Elyria, Ohio
323-1585

Cleveland Rd.
of Education

Coordinator of
Industrial Arts

Lahren, Dr. James
State Univ. of N. Y.
Buffalo, New York
831-3420

State Univ. of
New York at
Buffalo

Lecturer in Voca-
tional Education

Leskow, Sonia
234 W. 49th Ave.
Gary, Indiana 46408
254-9193

Gary Tech. Voca-
tional School

Coordinator
Guidance & Place-
ment

Neosky, Dr. Paul R.
2007 West River Road
Grand Is., N.Y. 20616

Buffalo State
Univ. College

Professor

Morton, Joseph H.
Route 1, Box 197-A
Bryans Rd., MD 20616
333-6145

Board of Educ.
State of Md.

Specialist in
T & I

Quinn, Charles J.
27 Greystone Rd.
W. Hartford, Conn. 06107
521-2309

Hartford Board
of Education

Work Study Coord.

Reynolds, John W.
2250 Miskey Lake Trail
Atlanta, GA 30331
349-0552

Atlanta Area
Tech. School

Ass't Director

Roberts, John E.
147 N. Autumn St
Williamsville, N.Y. 14221
716-633-4630

St. Univ. College
Buffalo

Associate Prof.

Sparks, Montez S. Mrs.
715 Nestle Way
Charlotte, N.C. 28211
364-8770

Independence
High School

Occupational Mix
Coordinator

Velzy, Richard
150 Danube Drive
Pittsburgh, PA 15209
487-2228

Community College
of Allegheny Co.

Gov't Relations

Wing, Ronald W.
R. R. Box 115
Chatham, N. Y. 12037
353-3321

State Dept. of
Education

Assoc. Supv.
Bus. Education

CONSULTANTS

Dr. Herbert Brum, Assistant
Director, Programs for Dis-
advantaged Youth
Ohio Department of Education
Columbus, Ohio

Mr. Russell Gardner, Assistant
Director
Ohio Vocational Leadership
Development Program
Department of Vocational Education
Kent State University
Kent, Ohio

Mr. Carl Gorman, Director
Ohio E.P.D.A. Teacher Ed. Project
Department of Vocational Education
Kent State University
Kent, Ohio

Dr. Mary Lee Hurt
Research Specialist
U. S. Office of Education
Washington, D. C.

Dr. Albert Rindeau, Chief
Experimental and Pilot Projects
U. S. Office of Education
Washington, D. C.

Dr. Byrl R. Shoemaker, Director
Division of Vocational Education
Ohio Department of Education
Columbus, Ohio

Dr. Jay Smink, Director
Pennsylvania Research Coordinating Unit
State Department of Education
Harrisburg, Pennsylvania

Dr. Darrell Ward, Specialist
State Leadership Program
Center for Voc. Ed. and Tech. Ed.
Ohio State University
Columbus, Ohio

RESOURCE PERSONNEL

Dr. Paul Braden, Director
Sch. of Occ. and Adult Ed.
Oklahoma State Univ.
Stillwater, Oklahoma 74074

Dr. Herbert Brum, Ass't Dir.
Voc. Educ. for Disadvantaged Youth
Division of Vocational Education
State Department of Education
65 South Front Street
Columbus, Ohio 43215

Dr. Roy Butler, Acquisition Spec.
ERIC Clearinghouse on Voc.-Tech. Ed.
The Center for Voc.-Tech. Education
The Ohio State University
Columbus, Ohio 43210

Mr. Carl Gorman, Director
Ohio E.P.D.A. Teacher Ed. Project
Department of Vocational Education
Kent State University
Kent, Ohio 44242

Dr. Michael Joseph, Director
Minn. Work Opportunity Center
Minneapolis Public Schools
Minneapolis, Minn. 55414

Dr. James McNamara, Research Assoc.
Pennsylvania Research Coord. Unit
State Department of Education
Harrisberg, Penn.

Dr. Clayton Omvig, Director
Kentucky Research Coord. Unit
Univ. of Kentucky
Lexington, Kentucky 40506

Mr. John Parsons, Principal
McTigue Junior High School
5700 Hill Avenue
Toledo, Ohio 43615

Dr. Byrl R. Shoemaker, Dir.
Division of Voc. Education
Ohio Depts. of Education
65 South Front Street
Columbus, Ohio 43215

Dr. Jay Smink, Director
Pennsylvania Research Coord.
Unit
State Department of Education
Harrisberg, Pennsylvania

Mr. Darrell Ward, Specialist
State Leadership Program
The Center for Voc.-Tech.
Education
The Ohio State University
Columbus, Ohio 43210

A P P E N D I X C

SPECIMEN OF INSTITUTE PROGRAM

INSTITUTE 10

Metropolitan Area Application
of Vocational Education Innovations
Resulting from Research and
Development Programs

AGENDA

Monday, May 18, 1970

- 10:00 - 12:00 Welcome, Orientation, and Institute Organization
Charles W. Nichols
Kent State University
- 12:00 - 1:00 LUNCH
- 1:00 - 2:00 ERIC: Information System
Mr. Roy Butler
Ohio State University
Center for Vocational Technical Education
- 2:15 - 2:45 BREAK
- 2:45 - 4:00 ERIC: An Information System
Mr. Roy Butler

Tuesday, May 19, 1970

- 8:30 - 10:00 RCU: An Information System
Dr. Clayton Omvig
Kentucky R.C.U.
- 10:00 - 10:30 BREAK
- 10:30 - 12:00 Small Group Session to Develop Information System Models
- 12:00 - 1:00 LUNCH
- 1:00 - 3:00 Minneapolis Work Opportunity Center:
An Innovative Program
Dr. Michael Joseph
Director
- 3:00 - 3:30 BREAK
- 3:30 - 4:30 An Occupational Information System
Dr. Paul Braden
Oklahoma
- 7:00 - 9:00 A New Approach to Teach Education
Mr. Carl Gorman - KSU

INSTITUTE 10

Wednesday, May 20, 1970

- 8:30 - 10:00 A Systems Approach to Program Planning
Dr. Jay Smink
Dr. James McNamara
Pennsylvania RCU
- 10:00 - 10:30 BREAK
- 10:30 - 12:00 A Systems Approach to Program Planning (continued)
- 12:00 - 1:00 LUNCH
- 1:00 - 2:00 The Joint Vocational School District: A Concept
Dr. Byrl Shoemaker
Ohio State Department
of Education
- 2:30 - 3:00 BREAK
- 3:00 - 4:30 Small Group Sessions to Develop Information System Models
- 6:30 ; Institute Banquet

Thursday, May 21, 1971

- 9:00 - 10:15 Occupational Orientation and Work Exploration:
A Program
Mr. John Parsons, Principal
McTigue Jr. High School
Toledo, Ohio
- 12:00 - 1:00 LUNCH
- 1:00 - 4:30 Trip to Jane Addams Vocational High School
Cleveland, Ohio

INSTITUTE 10

Friday, May 22, 1970

8:30 - 10:00 Simulation Techniques: An Approach
 Mr. Darrell Ward
 Ohio State University for
 Vocational Technical
 Education

10:00 - 10:30 BREAK

[illegible]

12:00 - 1:00 LUNCH

1:00 - 3:00 Reports, Reimbursement and Farewell

A P P E N D I X D

EVALUATION FORMS USED

SHORT TERM VOCATIONAL EDUCATION MULTIPLE INSTITUTES FOR EASTERN METROPOLITAN AREAS

Sponsored And Coordinated By The Division Of Vocational Education
College Of Education, Temple University, Philadelphia, Pennsylvania
Under U.S.O.E. Grant 9-0535

Institute #

Institute Evaluation Form #I

Name Date

Read each statement carefully and decide how you feel about it. You will agree with some statements and disagree with others. There are five possible answers to each statement. The "undecided" answer should be circled only when you have no opinion. Circle one answer where applicable and complete all statements. The purpose in requesting your name is to pair your pre-test with your post-test. All information furnished is confidential.

Example:	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
Air pollution must be attacked at the national, state and local levels	(SA)	A	U	D	SD

This person feels in no uncertain terms that air pollution must be attacked.

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
1. Vocational education should be just as much concerned with semi-skilled and operative type programs as it is in skilled and technical programs	SA	A	U	D	SD
2. Students who exhibit the ability to succeed in college and whose stated goal is college, should be discouraged from taking vocational education courses	SA	A	U	D	SD
3. The importance of vocational education cannot be emphasized enough to students	SA	A	U	D	SD
4. Failure to offer public vocational education and training cannot be justified in a democratic society	SA	A	U	D	SD
5. Vocational education trains for jobs which don't exist	SA	A	U	D	SD
6. The major function of the high school should be the preparation of students for entrance into college	SA	A	U	D	SD
7. Vocational education should be offered only to students with low academic ability	SA	A	U	D	SD

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
8. The cost of training workers should not be born by the public school system	SA	A	U	D	SD
9. Vocational education should not be in the high school because its skilled teacher qualifications, scheduling, and curricula are so different from regular high school requirements	SA	A	U	D	SD
10. Vocational education at the secondary level should be conducted outside the academic school system in separate vocational schools	SA	A	U	D	SD
11. The importance of vocational education cannot be emphasized enough to the general educators	SA	A	U	D	SD
12. High school graduates, regardless of the course taken, should be equipped upon graduation with a salable skill	SA	A	U	D	SD
13. Increased opportunities for vocational education will result in fewer dropouts	SA	A	U	D	SD
14. Vocational education contributes to the solution of unemployment	SA	A	U	D	SD
15. For the "average" student, academic educational courses are more useful than vocational courses	SA	A	U	D	SD
16. Whether vocational education is offered should be an important factor in determining public high school accreditation	SA	A	U	D	SD
17. The climate for vocational education is better in a comprehensive high school than in a separate vocational school	SA	A	U	D	SD
18. The information provided in the college preparatory course of study is more applicable to getting and holding a job than the information provided in a vocational education course	SA	A	U	D	SD
19. More "average" students should be encouraged to enroll in vocational education programs	SA	A	U	D	SD
20. Vocational education is an educational frill	SA	A	U	D	SD
21. No area of education is more or less important than vocational education	SA	A	U	D	SD
22. The importance of vocational education cannot be emphasized enough to the lay public	SA	A	U	D	SD

		Strongly Agree	Agree	Un- decided	Dis- agree	X-1 Strongly Disagree
X-53.	A current innovation which suggests that vocational shop teachers should be trained in college rather than industry is looked upon with favor by vocational educators	SA	A	U	D	SD
X-54.	Technological progress has removed the need for relating academic subjects to the skilled areas . . .	SA	A	U	D	SD
X-55.	Vocational educators are so steeped in tradition that they are reluctant to accept change	SA	A	U	D	SD
X-56.	The practice of developing vocational curricula from job analyses is a deterrent to progress	SA	A	U	D	SD
X-57.	Vocational educators, particularly those who are recruited from industry, do not have the expertise to utilize research	SA	A	U	D	SD
X-58.	Innovations resulting from research in vocational education are often too impractical to use	SA	A	U	D	SD
X-59.	Research proposals in vocational education are too often developed by educators who are not knowledgeable in vocational education . . .	SA	A	U	D	SD
X-60.	The various vocational research centers in the U.S.A. should request assistance from the State and Local Directors of Vocational Education in getting research problems	SA	A	U	D	SD
X-61.	Research in vocational education is influenced too much by academically oriented professors	SA	A	U	D	SD
X-62.	Most current research in vocational education has little or no application in the shop or classroom . . .	SA	A	U	D	SD
X-63.	Wasteful duplication of effort, particularly in vocational curriculum construction, occurs when research isn't conducted to determine what is already available	SA	A	U	D	SD

	Strongly Agree	Agree	Un- decided	Dis- agree	X-2 Strongly Disagree
X-64. It is almost impossible for the local director of vocational education to find out what is available in vocational curriculum construction . .	SA	A	U	D	SD
X-65. The preparation of vocational educators is being detrimentally influenced by academically oriented college professors who control teacher preparation programs	SA	A	U	D	SD
X-66. Research in vocational education suffers from poor coordination	SA	A	U	D	SD
X-67. Major metropolitan cities, because of the size, quality, and diversity of their professional staff, provide adequate research in vocational education to meet their needs	SA	A	U	D	SD

	Strongly Agree	Agree	Undecided	Disagree	Disagree Strongly
23. The general education curriculum is the best preparation for entry into an occupation upon graduation from high school	SA	A	U	D	SD
24. Vocational education courses are as important for college bound students as they are for non-college bound students	SA	A	U	D	SD
25. Funds allocated in the school budget to vocational education should be in proportion to those students who enter the labor market from school	SA	A	U	D	SD
26. The national per capita income is adversely affected as public support for vocational education declines	SA	A	U	D	SD
27. Leaders of minority groups oppose vocational education for their people	SA	A	U	D	SD
28. Vocational education courses prepare students for many jobs which lack public prestige	SA	A	U	D	SD
29. Leaders of minority groups prefer college prep programs for their people rather than vocational education	SA	A	U	D	SD
30. Youth are being educationally shortchanged due to inadequate vocational offerings	SA	A	U	D	SD
31. Vocational education in rural areas is more important than vocational education in urban areas	SA	A	U	D	SD
32. More "above average" students should be encouraged to enroll in vocational education	SA	A	U	D	SD
33. Currently employed vocational education teachers are less adequately prepared for their jobs than academic teachers	SA	A	U	D	SD
34. Vocational education teachers know and meet the individual needs of their students better than academic teachers	SA	A	U	D	SD
35. Only the non-college-bound need vocational education	SA	A	U	D	SD
36. Parents of minority group students generally exhibit little or no interest in their children's progress in school	SA	A	U	D	SD
37. Children whose parents are foreign born get more parental support for entering a vocational program than children from parents born in America	SA	A	U	D	SD

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
38. Most students would not benefit from the job skill instruction offered in vocational education programs	SA	A	U	D	SD
39. Vocational education courses are beneficial primarily for those who are terminating their education at the end of high school	SA	A	U	D	SD
40. The vocational education curriculum provides a better preparation for more jobs than does the college preparatory curriculum	SA	A	U	D	SD
41. Vocational education skill courses provide learning experiences geared to individual needs better than academic courses	SA	A	U	D	SD
42. Vocational education programs help keep the potential dropout in school	SA	A	U	D	SD
43. Vocational education should be delayed until after high school graduation	SA	A	U	D	SD
44. Employers prefer college preparatory graduates to vocational education graduates because they are more capable	SA	A	U	D	SD
45. Occupations, other than the professions, require less able students than the college preparatory students.....	SA	A	U	D	SD
46. Employers would prefer vocational graduates over college preparatory graduates, if more able, rather than less able students elected vocational education	SA	A	U	D	SD
47. Academic proficiency should count more than vocational proficiency when setting high school graduation requirements for vocational students	SA	A	U	D	SD
48. Academic counseling should be given precedence over occupational counseling because high school youth are too inexperienced to make occupational decisions	SA	A	U	D	SD
49. The shop portion of vocational education is important to public education because it provides a haven for problem youth	SA	A	U	D	SD
50. Vocational education should prepare the student for college as well as for work	SA	A	U	D	SD
51. Part-time cooperative vocational education is the best type because the skilled training is given in industry where it is always available, kept up-to-date, and avoids costly educational physical facilities, equipment and staff	SA	A	U	D	SD
52. Minority groups attending vocational education programs want preferential treatment	SA	A	U	D	SD

SHORT TERM VOCATIONAL EDUCATION MULTIPLE INSTITUTES FOR
EASTERN METROPOLITAN AREAS

Sponsored And Coordinated By The Division Of Vocational Education
College Of Education, Temple University, Philadelphia, Pennsylvania
Under U.S.O.E. Grant 9-0535

Institute # _____

Institute Evaluation Form #II

Name: _____

Read each statement carefully and decide how you feel about it. You will agree with some statements and disagree with others. There are five possible answers to each statement. The "undecided" answer should be circled only when you have no opinion. Circle one answer where applicable and complete all statements. The purpose in requesting your name is to pair your pre-test with your post-test. All information furnished is confidential.

Example:

	Strongly Agree	Agree	Un- decided	Dis- agree	Strongly Disagree
Air pollution must be attacked at the national, state and local levels	(SA)	A	U	D	SD

This person feels in no uncertain terms that air pollution must be attacked.

	Strongly Agree	Agree	Un- decided	Dis- agree	Strongly Disagree
1. The objectives of this Institute were clear to me	SA	A	U	D	SD
2. The objectives of this Institute were not realistic	SA	A	U	D	SD
3. Specific objectives made it easy to work efficiently . .	SA	A	U	D	SD
4. The participants accepted the objectives of this Institute .	SA	A	U	D	SD
5. The objectives of this Institute were not the same as my objectives . . .	SA	A	U	D	SD

	Strongly Agree	Agree	Un- decided	Dis- agree	Strongly Disagree
6. I did not learn anything new . . .	SA	A	U	D	SD
7. The material presented was valuable to me	SA	A	U	D	SD
8. I could have experienced as much by reading a book	SA	A	U	D	SD
9. Possible solutions to my problems were considered	SA	A	U	D	SD
10. The information presented was too elementary	SA	A	U	D	SD
11. The speakers really knew their subject	SA	A	U	D	SD
12. The discussion leaders were well prepared	SA	A	U	D	SD
13. I was stimulated to think about the topics presented . . .	SA	A	U	D	SD
14. New professional associations were made which will help	SA	A	U	D	SD
15. We worked together well as a group	SA	A	U	D	SD
16. We did not relate theory to practice	SA	A	U	D	SD
17. The sessions followed a logical pattern	SA	A	U	D	SD
18. The schedule was too inflexible..	SA	A	U	D	SD
19. The group discussions were excellent	SA	A	U	D	SD
20. There was very little time for informal dialogue	SA	A	U	D	SD
21. I did not have an opportunity to express my ideas	SA	A	U	D	SD
22. I really felt a part of this group	SA	A	U	D	SD
23. My time was well spent	SA	A	U	D	SD
24. The Institute met my expectations	SA	A	U	D	SD

	Strongly Agree	Agree	Un- decided	Dis- agree	Strongly Disagree
25. The reference materials that were provided were very helpful	SA	A	U	D	SD
26. Too much time was devoted to trivial matters	SA	A	U	D	SD
27. The information presented was too advanced	SA	A	U	D	SD
28. The content presented was applicable to the important problems in this area	SA	A	U	D	SD
29. Institutes such as this should be offered again in future years .	SA	A	U	D	SD
30. Institutes such as this will contribute greatly to stimulating interest in improving vocational education in the metropolitan areas	SA	A	U	D	SD
31. As a result of your participation in this institute, what plans have you formulated which you may present through appropriate channels for consideration and action in your community either now or the immediate future? Outline briefly the key points.					
32. As a result of your contacts with the participants and consultants at this institute, have you decided to seek some continuing means of exchanging information with any of them? What types of information can the consultants or participants contribute that would be helpful to your work?					

33. In your opinion, what were the major strengths of this institute?

34. In your opinion, what were the major weaknesses of this institute?

35. If you were to conduct an institute similar to this one, what would you do differently from what was done in this institute?

36. Additional comments about institute.

37. If you had it to do over again would you apply for this institute which you have just completed? Yes _____ No _____ Uncertain _____

38. If an institute such as this is held again would you recommend to your peers that they attend? Yes _____ No _____ Uncertain _____

METROPOLITAN AREA APPLICATION OF VOCATIONAL
EDUCATION INNOVATIONS RESULTING FROM RESEARCH AND
DEVELOPMENT PROGRAMS

INSTITUTE #10

Kent State University

Sponsored and Coordinated by The Division of Vocational Education, College of Education, Temple University, Philadelphia, Pennsylvania.

Dear Participant:

As a part of the follow-up of Institute #10 which you attended last May, we are asking you to take a few minutes to complete the following evaluation form. The results of this evaluation will be presented as a group, no individuals names will be identified.

Sincerely,

Charles W. Nichols, Director
Institute #10

Please check the appropriate space relative to action taken by you as a result of attending institute #10.

- | | | | |
|--|--|-------------------|-------------------|
| 1. Have made no changes or taken any action | <u> </u> yes <u> </u> no | | |
| | <u> </u> negative | | |
| 2. Developed a greater awareness of urban problems | <u> </u> yes <u> </u> no | | |
| | <u> </u> negative | | |
| 3. Changed my attitude toward vocational education in metropolitan areas | <u> </u> yes <u> </u> no | | |
| | <u> </u> negative | | |
| | <u>In Planning</u> | <u>Action in</u> | <u>Action</u> |
| | <u>Stage</u> | <u>Process</u> | <u>Completed</u> |
| 4. Discussed the ideas and concepts informally with my colleagues | <u> </u> | <u> </u> | <u> </u> |
| 5. Submitted a structured oral report to my colleagues | <u> </u> | <u> </u> | <u> </u> |
| 6. Submitted a structured oral report to my immediate supervisor | <u> </u> | <u> </u> | <u> </u> |

	<u>In Planning Stage</u>	<u>Action in Process</u>	<u>Action Completed</u>
7. Submitted a structured oral report to my top administrator	_____	_____	_____
8. Presented a written report to my superiors	_____	_____	_____
9. Organized a meeting to disseminate the information gained in institute #10	_____	_____	_____
10. Prepared a plan to implement the concepts gained in institute #10	_____	_____	_____
11. Revised our program planning because of ideas obtained in institute 10	_____	_____	_____
12. Modified data gathering procedures in personal and/or professional research	_____	_____	_____
13. Improved research information services within your organization	_____	_____	_____
14. Improved existing educational programs as a result of attending institute #10	_____	_____	_____
15. Initiated new educational programs based on institute #10 information	_____	_____	_____
16. Exchanged materials with institute participants and/or consultants	_____	_____	_____

17. Identify other action you have taken resulting from attending Institute #10

_____	_____
_____	_____
_____	_____

18. Because of new or renewed interest as a result of attendance in Institute #10, do you plan to attend other similar Institutes or Conferences to reinforce or gain more information?

Yes _____ No _____ Not interested _____

19. Do you feel you can effect change in your situation or State that reflects concepts gained at Institute #10?

Yes _____ No _____ Not in a position to _____

20. Have you had "second thoughts" about Institute #10 and its applications to your position? Yes _____
No _____

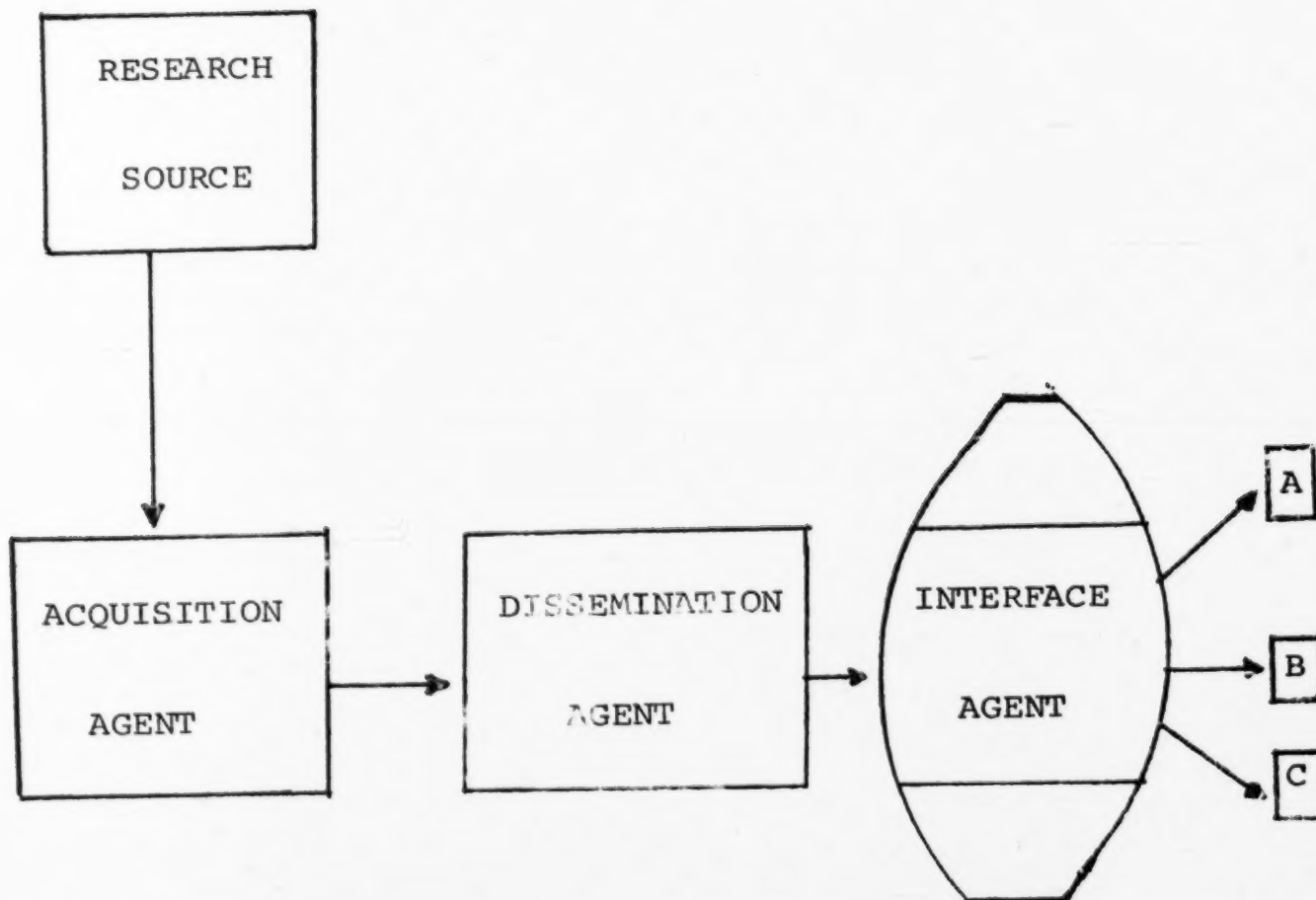
Are these thoughts positive _____ or Negative _____?

Can you state briefly what they are? _____

A P P E N D I X E

COPIES OF MODELS, GUIDES, AND/OR INNOVATIVE PROCEDURES

DISSEMINATION MODEL



A, B, and C represent research consumers who are interested in a specific topic.

The above model was developed as a graphic representation of a dissemination process which provided an interface agent between the research source and a specific consumer concerned with a very specific topic. The interface agent would serve as a distributor rather than a source. The search would result from a specific request from an individual potential consumer.